BNF 63

March 2012

Installation and User Manual for BNF server and BNF Toolkit

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This document is produced by:

Clinical and Biomedical Computing Limited
27-28 Bridge Street
Cambridge
CB2 1UJ
Tel: +44 (0) 1223 364444
Email: info@cbcl.co.uk
Web: http://www.cbcl.co.uk

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Chapter 1

Overview

Welcome to the BNF manual.

About this guide

The BNF manual provides detailed instructions for installing and using BNF.

Who is this guide for?

This guide is written for anyone installing, using or managing BNF. The guide assumes that you are familiar with web browsers and, if you are installing, have experience of installing server based software on Microsoft platforms

Conventions

This guide uses the following conventions:

Convention	Action
`setup.exe`	Type the text as shown.
<*variable*>	In command syntax, text in italics in angled brackets is variable.
Select	Point to the item and click the left mouse button.
Choose	Point to the specified Windows button and click the left mouse button.
Double-click	Click the left mouse button twice rapidly without moving the mouse.
Right-click	Click the right mouse button.
Drag	Hold the left mouse button down while you move an object across the screen.

System requirements

This section specifies the minimum requirements for running BNF.

Server requirements

To take advantage of BNF capabilities, the following specification is recommended for the server on which you intend to run BNF Intranet and BNF Toolkit

- Networked Server
- Windows 2000 (Professional, Server or Advanced Server) or Windows XP Professional, Windows 2003 Server

  (N.B. **Not compatible with Server 2008**)
- Minimum 400MHz Pentium processor
- Minimum 256 MB RAM
- Minimum 180 MB free hard disk space

Client requirements

Client machines require a web browser. For best results, select from the list below.

- BNF Web Application
  - Windows Operating Systems
    - Internet Explorer 5.01 or later.
    - Mozilla 1.1 or later
    - Mozilla Firefox 1.5 or later.
    - Opera 6 or later.
    - Netscape 6 or later.
  - Macintosh Operating Systems
    - Internet Explorer 5.2 or later
    - Mozilla 1.1 or later
    - Safari
  - Linux Operating Systems
    - Mozilla 1.1 or later
- BNF Toolkit
  - Windows Operating Systems
    - Internet Explorer 5.5 or later
    - Mozilla 1.6 or later
    - Mozilla Firefox 1.5 or later.

Installation components

In order to run BNF, you need to have already installed the following components

- On the server:
  - Microsoft Internet Information Server 5.0 (IIS) or later
  - On Servers using Microsoft Windows 2003, the ASP.NET Component should be installed from the operating system install media.

If you are intending to use BNF on a network you should assure yourself that the security settings of the IIS server are suitable for the environment, please consult the Microsoft web site for more details.

Chapter 2

Installing BNF Server

Overview

BNF Server will enable you to publish BNF to an intranet environment. The server will run as an Microsoft Internet Information Server (IIS) web application and requires the Microsoft .NET Framework version 1.1 to be installed. We recommend that you use a Windows 2000 Server or later and IIS5 or later for your installation.

Before you begin to install BNF server you should ensure that IIS 5 or later is installed and operating correctly.

If the Microsoft .NET Framework version 1.1 is not already installed on the server, the installer will install a suitable version.

During the installation process you will be given the options to install the BNF Toolkit. This component will allow you to create Local Formularies of the BNF using a web interface. This application replaces previous versions of the Local Formulary Editor. If you choose to install this component you should review the security placed on the BNF Toolkit to ensure that only suitably authenticated users may edit Local Formularies.

If the Installer detects any existing BNF Local Formularies, it will upgrade those formularies to be compatible with the current BNF. For large formularies this process may take some time to complete, you should not attempt to exit the installer process once the update of local formularies has begun.

Note: Windows 2000 Professional, Windows XP Professional: BNF Server may be run under these operating systems, however the reader should be aware that the licenses for IIS on these platforms limit the number of simultaneous connections allowed. For more information please consult the relevant license agreements

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Backup your Server

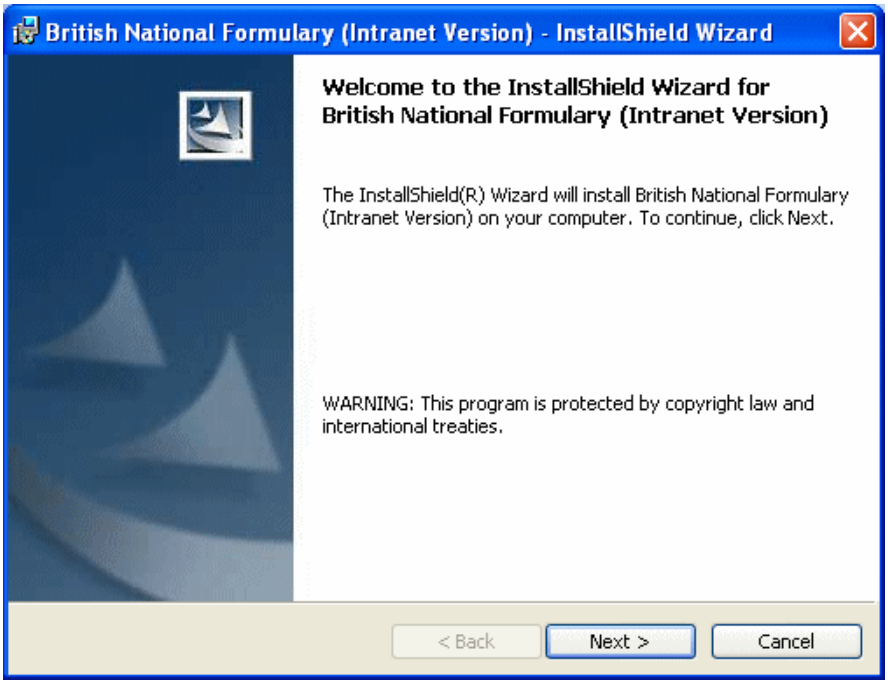
If you are upgrading an existing installation of BNF, we strongly recommend that you back up your server, especially the Local Formularies that are stored on the server. The upgrade process does not change the existing copy of the local formularies and this is an advisable precautionary measure.

To backup the Local Formularies of your existing BNF installation the directory and all sub directories of <INSTALLDIR>\lfe\data must be replicated, where <INSTALLDIR> is the installation directory for the existing BNF install, by default c:\InetPub\wwwroot\bnf\ directory.

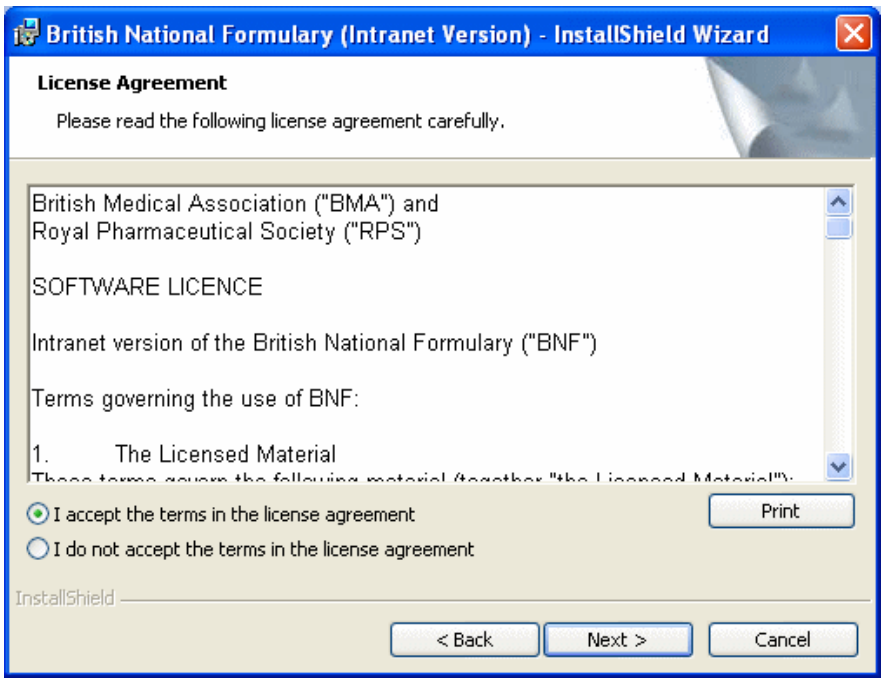
Installing BNF Server

BNF Server is distributed in CD format.

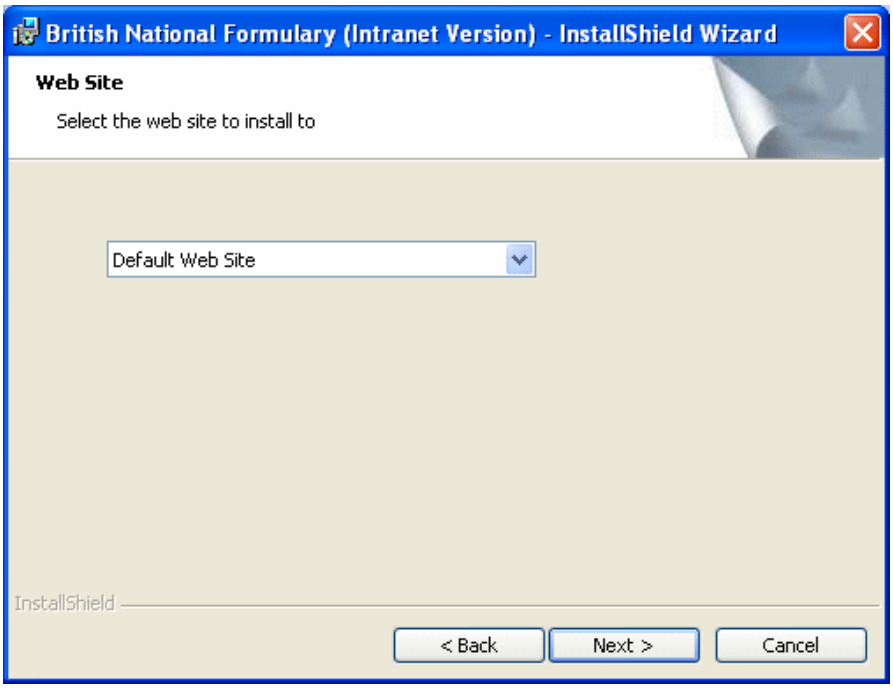
1. Log on to the server as a user with administrative permissions, preferably the “Administrator” user.
2. Insert the BNF Server CD into the server’s CD-ROM drive. The CD should automatically run and the welcome screen will appear. Click the **Next.**


British National Formulary (Intranet Version) - InstallShield Wizard
Welcome to the InstallShield Wizard for British National Formulary (Intranet Version)
The InstallShield(R) Wizard will install British National Formulary (Intranet Version) on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

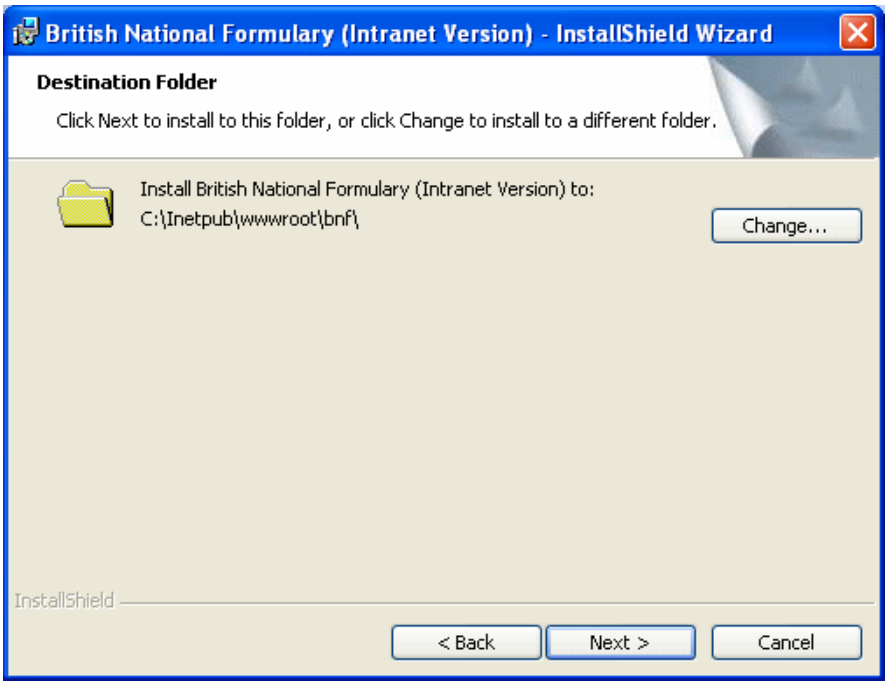
3. When the license is presented read the license and click the “I accept ...” radio button to accept the license. *You will not be able to install BNF without accepting the license.*


British National Formulary (Intranet Version) - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
British Medical Association ("BMA") and
Royal Pharmaceutical Society ("RPS")
SOFTWARE LICENCE
Intranet version of the British National Formulary ("BNF")
Terms governing the use of BNF:
1. The Licensed Material
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

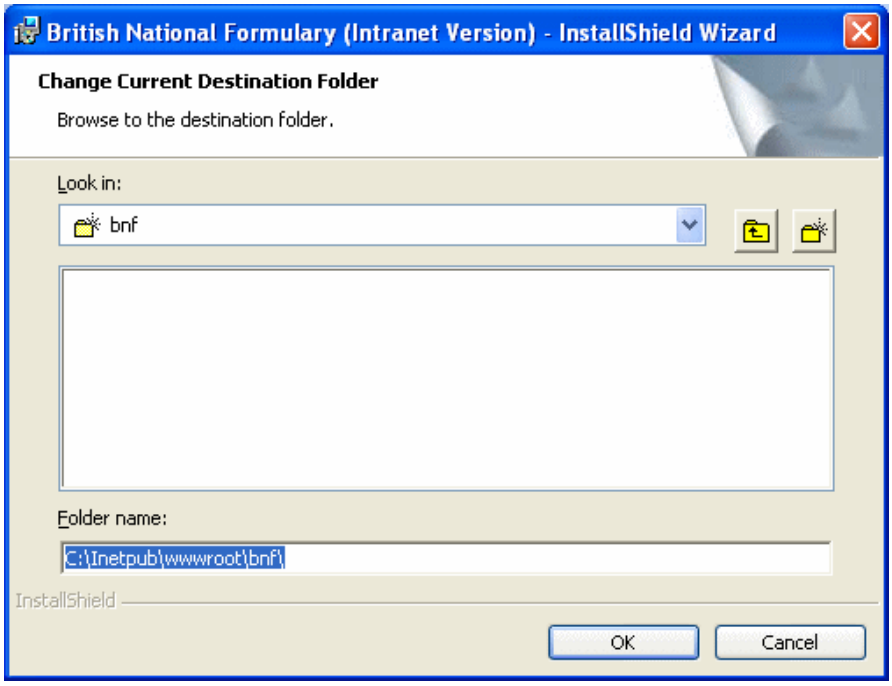
4. If you are already running multiple web servers on your machine you may select which website to install the BNF using the drop-down box. Click on the down arrow, highlight the web server required and click **Next**.



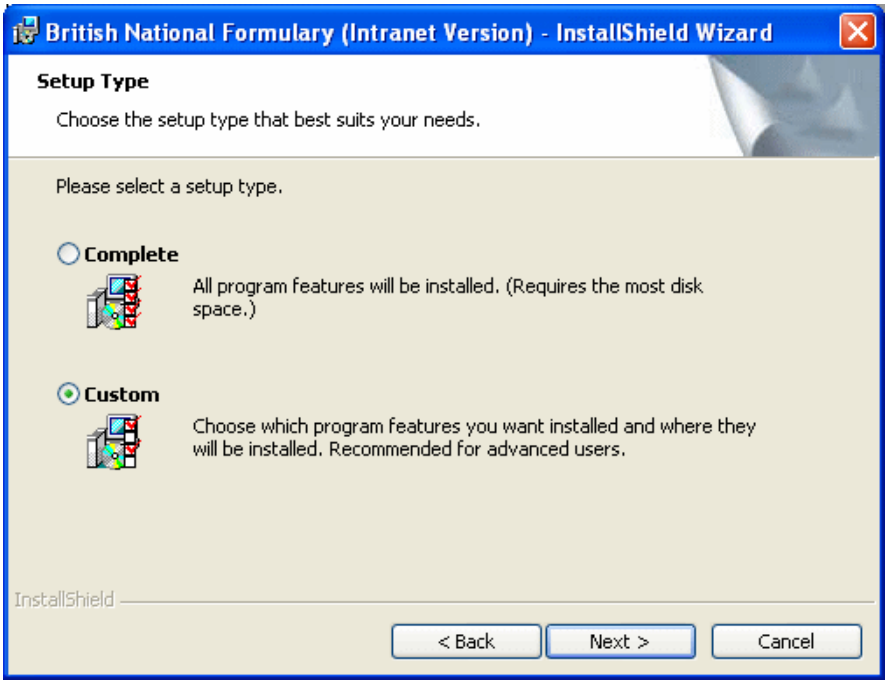
5. If you selected a custom web site then click **Change** to install at a new location. Otherwise click **Next** and go to step 7.


British National Formulary (Intranet Version) - InstallShield Wizard
Destination Folder
Click Next to install to this folder, or click Change to install to a different folder.
Install British National Formulary (Intranet Version) to:
C:\Inetpub\wwwroot\bnf\
Change...
InstallShield
< Back
Next >
Cancel

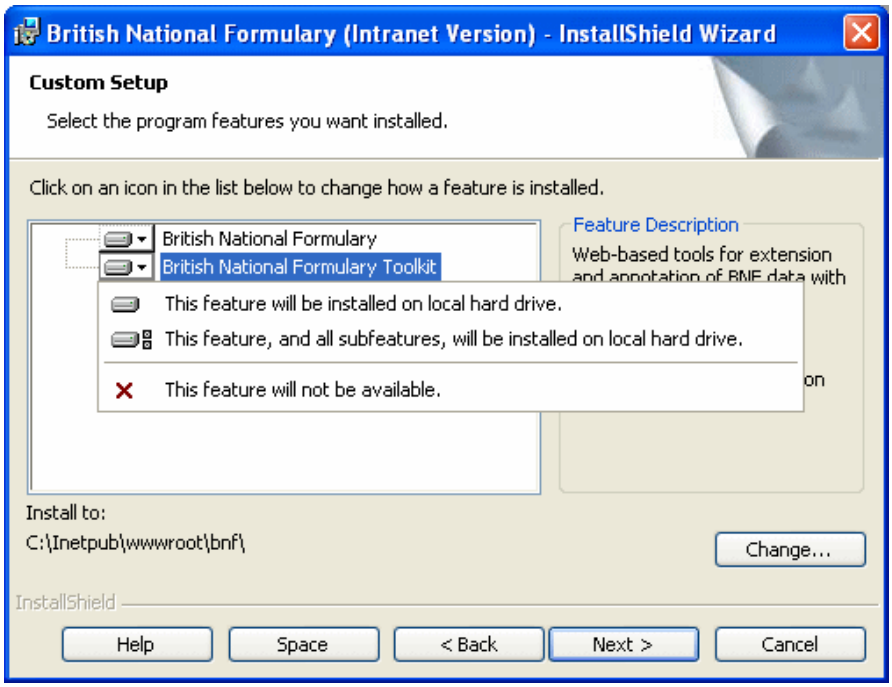
6. Enter the new destination folder name and click **OK**.



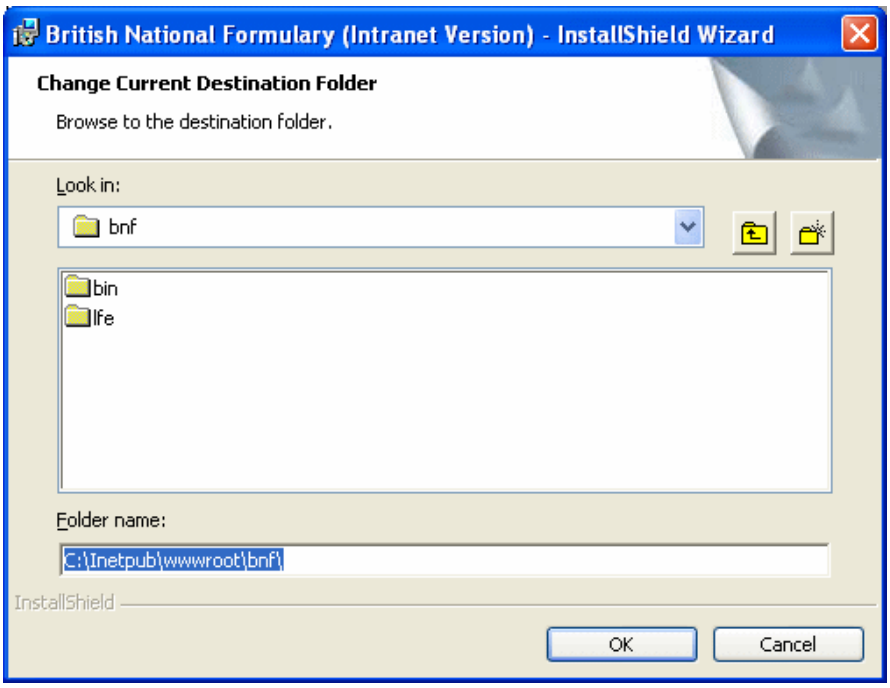
7. Click “Custom” to change the BNF server and BNF Toolkit install options. Otherwise click “Complete”, click **Next** and go to step 10.


British National Formulary (Intranet Version) - InstallShield Wizard
Setup Type
Choose the setup type that best suits your needs.
Please select a setup type.
Complete
All program features will be installed. (Requires the most disk space.)
Custom
Choose which program features you want installed and where they will be installed. Recommended for advanced users.
InstallShield
< Back
Next >
Cancel

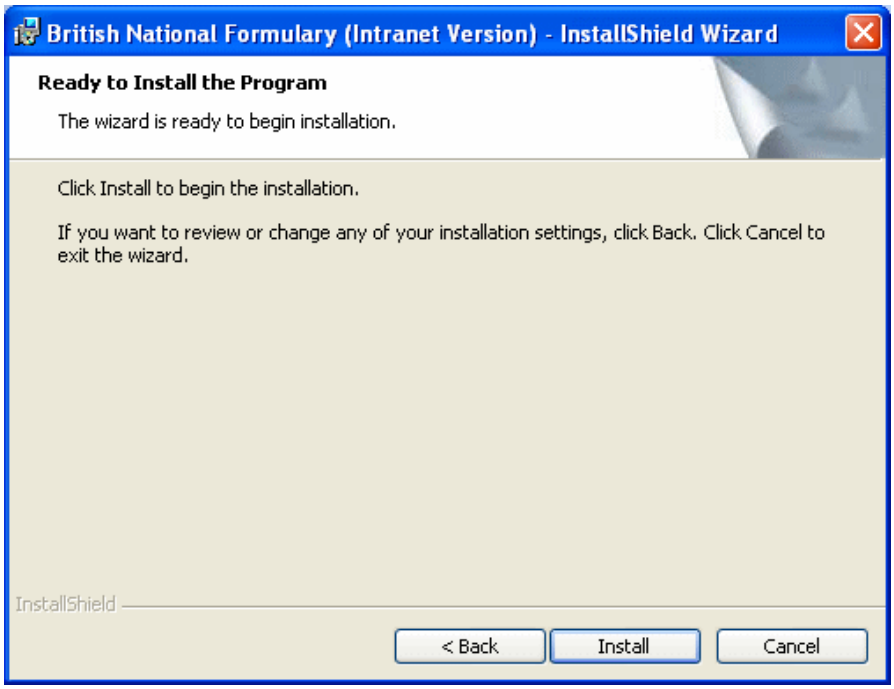
8. You may elect to install the BNF server and optionally the BNF Toolkit. The BNF Server is a mandatory item of the installation process. Click **Change** to select a different destination folder. When you have made you selections please click **Next** and go to step 9.


British National Formulary (Intranet Version) - InstallShield Wizard
Custom Setup
Select the program features you want installed.
Click on an icon in the list below to change how a feature is installed.
British National Formulary
British National Formulary Toolkit
Feature Description
Web-based tools for extension
This feature will be installed on local hard drive.
This feature, and all subfeatures, will be installed on local hard drive.
This feature will not be available.
Install to:
C:\Inetpub\wwwroot\bnf\
Change...
InstallShield
Help
Space
< Back
Next >
Cancel

9. You can browser to a different folder or enter a new folder name.

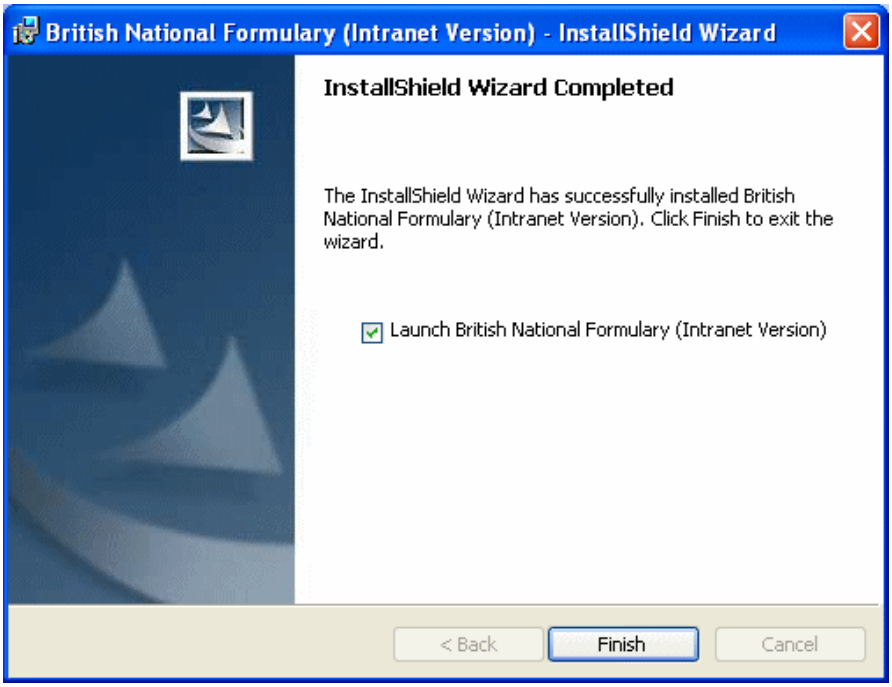


10. You may click **Cancel** if you wish to **abort** the installation, but you will have to commence the installation process from the start if you wish to complete the installation process again. Click **Install** and wait while the installation completes.


British National Formulary (Intranet Version) - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

11. When the installation has completed you will have the option to “Launch BNF”. When you click **Finish**, BNF will be launched in your default web browser. *Please note if you are installing to a non default website you will*

not be able to view the BNF until the correct website has been manually configured, refer to the section ***Installing to a non Default Website*** *under the* ***Post installation tasks*** *section*


British National Formulary (Intranet Version) - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed British National Formulary (Intranet Version). Click Finish to exit the wizard.
Launch British National Formulary (Intranet Version)
< Back
Finish
Cancel

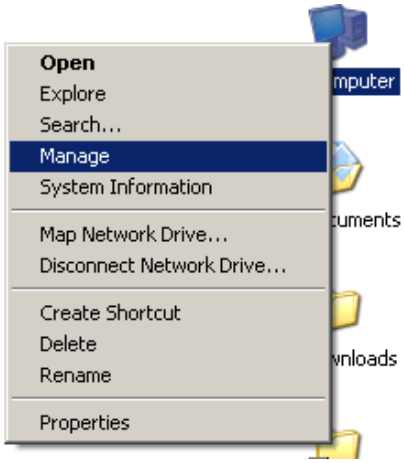
Post-installation Tasks

Installing to a non Default Website

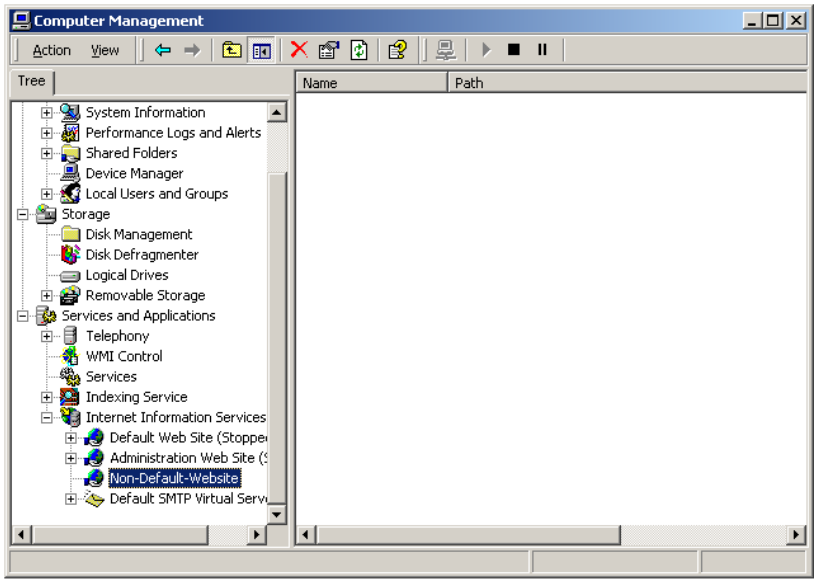
If the BNF is installed to a website other than the Default website listed in Internet Information Services Manager, the correct website must be configured manually.

If you have already configured BNF on your website, the settings from your previous install should remain and the following should be unnecessary.

Right-Click on My Computer on your Desktop and select the **Manage** option



The Computer Management Console will appear, scroll down to the bottom of the left hand (tree) pain and expand **Services and Applications** -> **Internet Information Server** -> **Web Sites**. Now select the Site that you wish to install the BNF into.

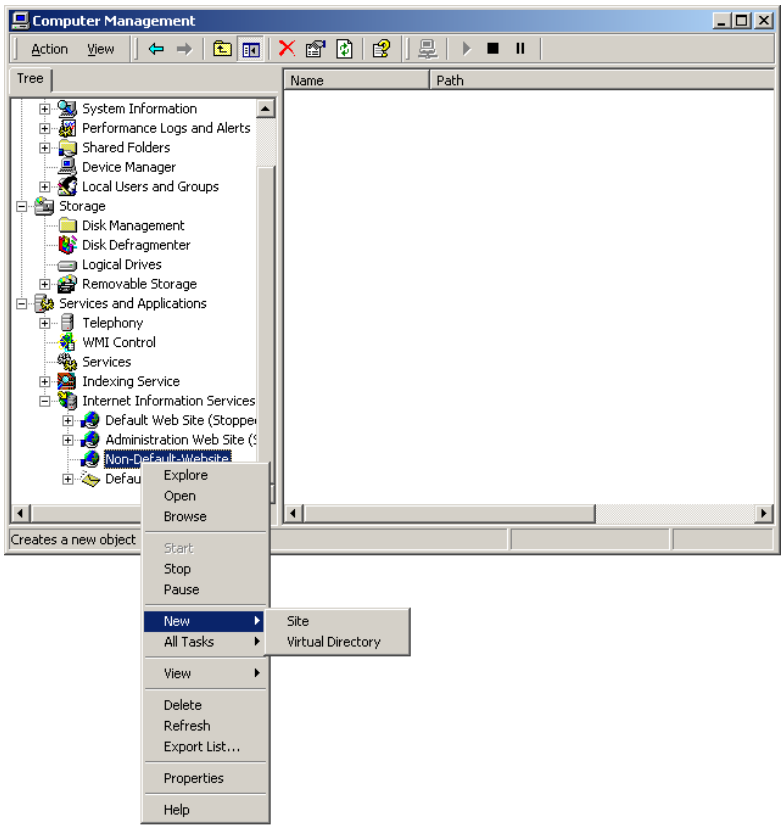


To configure the BNF to work on non-default web sites you need to create the following virtual directories. (INSTALLROOT refers to the directory into which the BNF was installed e.g. d:\Inetpub\wwwroot\bnf\ )

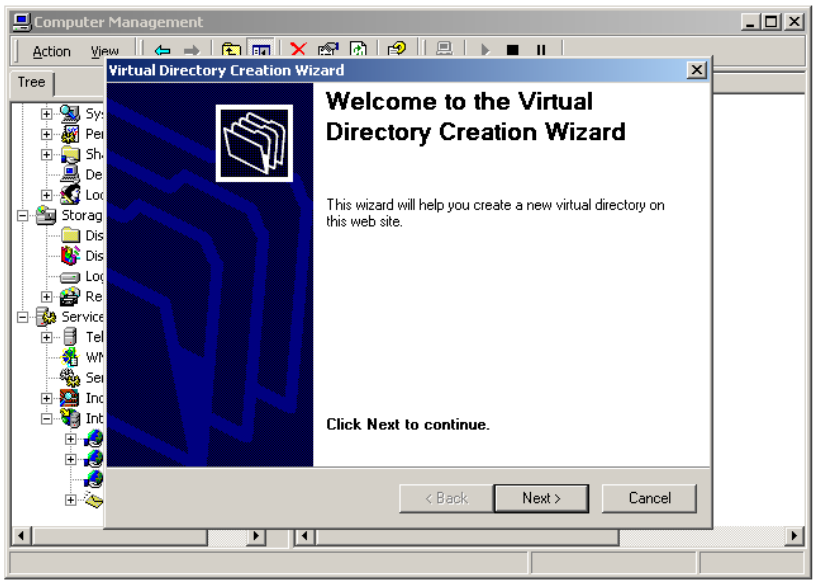
- ‘bnf’ pointing to INSTALLROOT , an application mapping should be created with the name: bnf
- ‘bnftoolkit’ pointing to INSTALLROOT, this directory does NOT need to be set with an application mapping.
- ‘lfe’ under ‘bnftoolkit’ pointing to INSTALLROOT\lfe\ , an application mapping should be created with the name: bnftoolkit

Please Note : The bnftoolkit virtual directories are not needed if the BNF Toolkit is not installed.

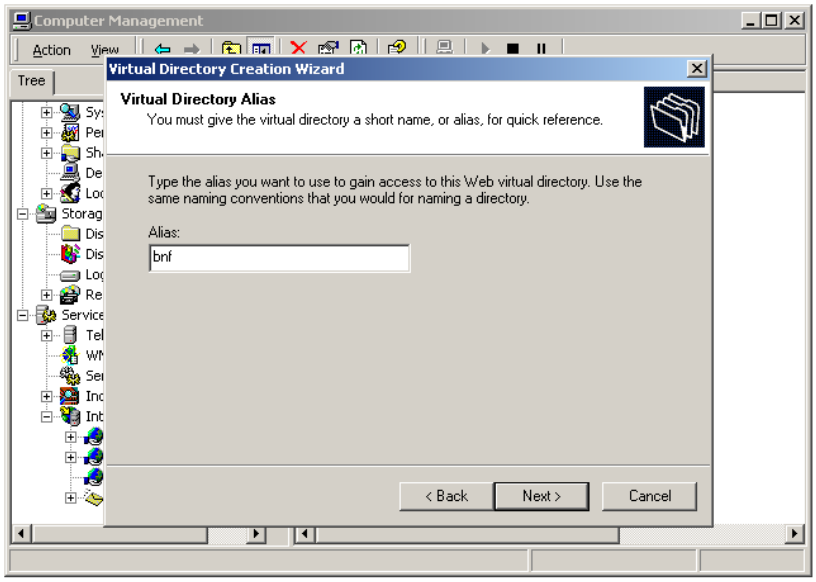
To install a virtual directory , Right click on the website, select **New** from the list, then **Virtual Directory**.



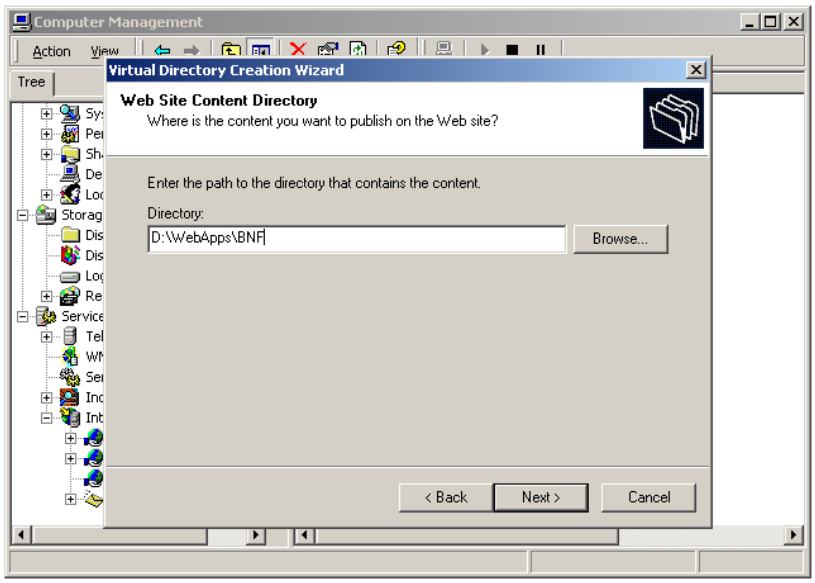
The virtual directory wizard will now start. Click **Next** to continue.



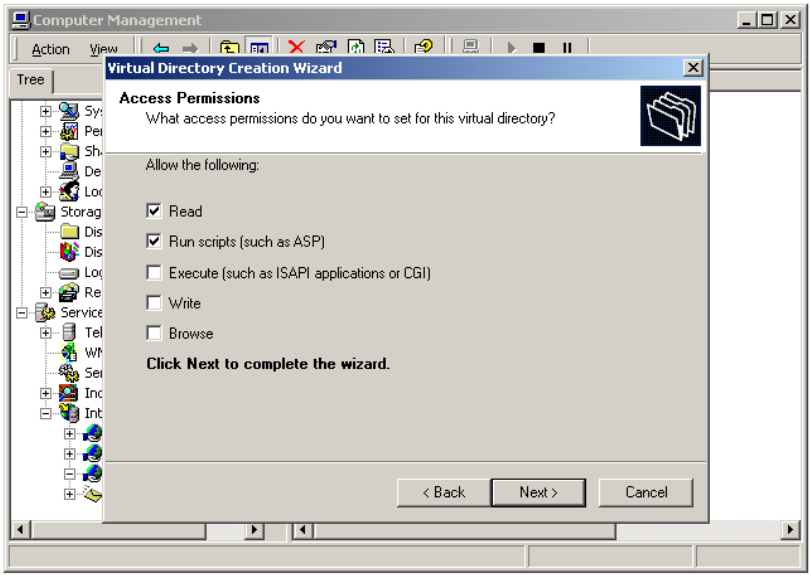
Enter the name of the virtual directory required.


Computer Management
Action
View
Tree
Virtual Directory Creation Wizard
Virtual Directory Alias
You must give the virtual directory a short name, or alias, for quick reference.
Type the alias you want to use to gain access to this Web virtual directory. Use the same naming conventions that you would for naming a directory.
Alias:
bnf
< Back
Next >
Cancel

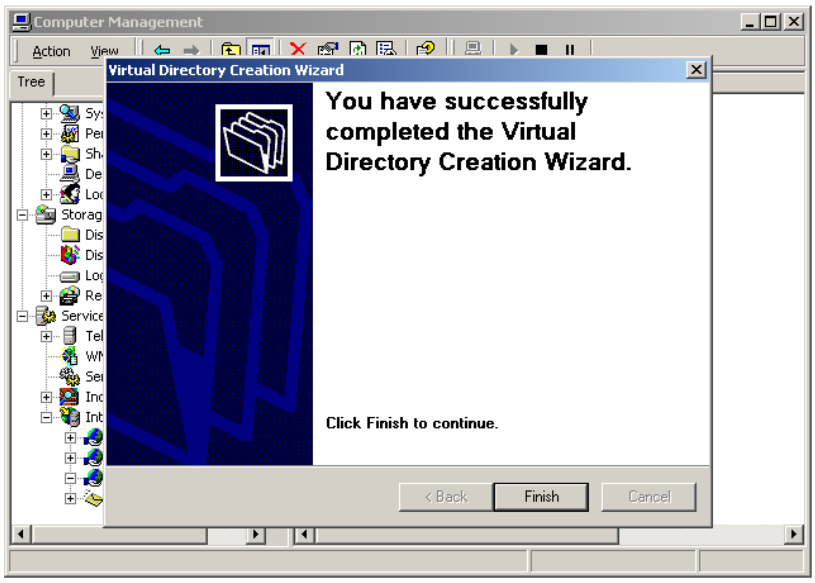
Browse or enter the path to the directory required.



The access permissions should be left as **Read** and **Run Scripts.** Click **Next**

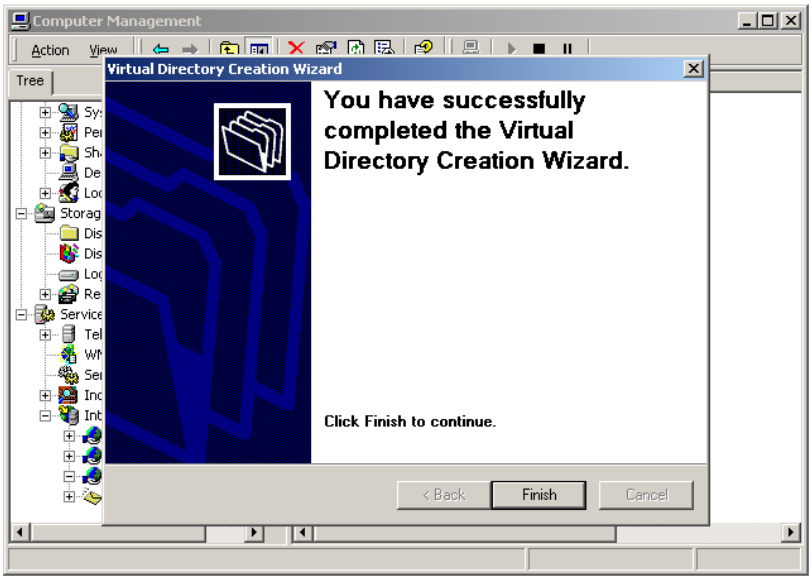


The virtual directory wizard will now finish. Click **Finish**

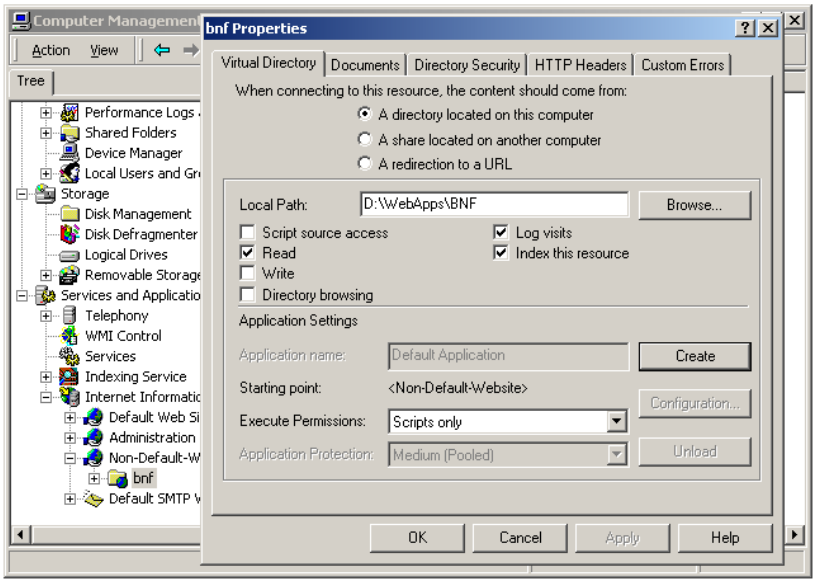


Repeat this procedure for each directories listed above.

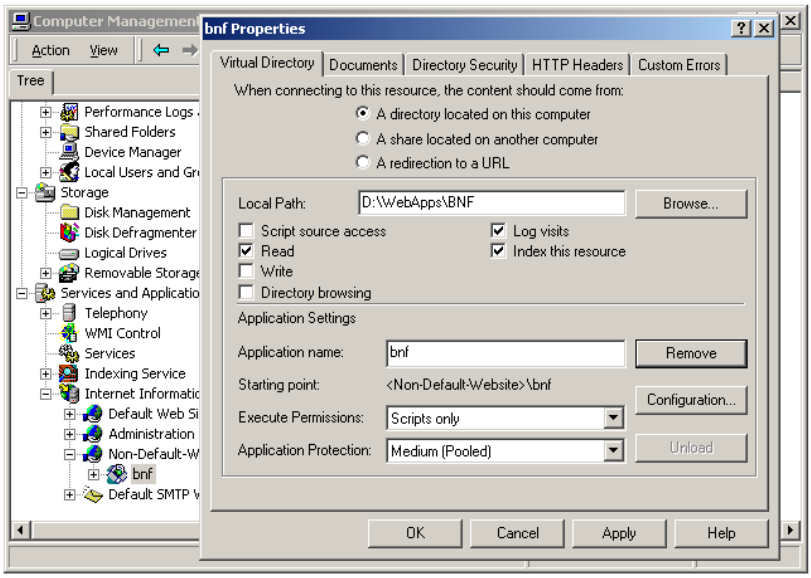
To install an Application mapping, with the Computer Management Console open, expand the website that BNF should be installed into. The virtual directory bnf should be visible.



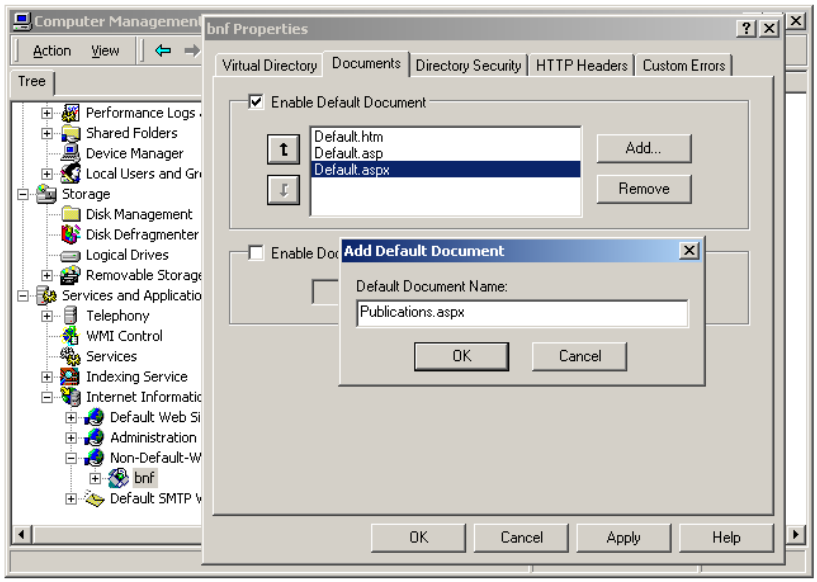
Right click on the virtual directory, in this case bnf, and select **Properties**



Click the **Create** button



For the bnf virtual directory ONLY, click the **Documents** tab, then click **Add** and enter the name: Publications.aspx



Click **OK,** then **Apply** and **OK**.

If the BNF Toolkit is installed, create an application mapping for the bnftoolkit/lfe directory without changing the Default document.

When all the virtual directories and application mappings have been created the BNF should be available at

http://website/bnf/

The local formulary editor should be at

http://website/bnftoolkit/lfe/

Securing IIS

We would advise that the server on which IIS is run and the installation of IIS is secured as recommenced by the Microsoft Security Web Site. This will ensure that the server is not vulnerable to the IIS specific Internet worms that exist.

Securing the BNF Toolkit

We would recommend that the BNF Toolkit which enables local formulary editors to edit local formularies, and administrators to publish local formularies be secured with Windows based authentication in the BNF Toolkit application.

When you install the BNF for the first time the correct IIS settings will be set up for you. Due to the differences in particular server installations the IIS settings should be checked as detailed below. If you are not using IE5 or above for a browser you will need to change one of the settings in IIS.

Checking IIS Settings

1. Open the IIS Console. This can be done by opening the **Control Panel**, clicking **Administrative Tools** and clicking on **Internet Services Manager**.
2. Expand the tree for bnftoolkit to show lfe.
3. Right click on lfe and click on **properties**.
4. Click on the **Directory Security** tab and then the **Edit** button in the Anonymous access and authentication control section.
5. The **Anonymous access** tick box should be left blank so that only known users can get access to the BNF Toolkit.
6. If you are not using IE5 or above, the **Basic Authentication** box should be ticked.
7. The **Integrated Windows Authentication** box should also be ticked so that users who have already logged on to windows can be automatically authenticated.
8. Click **OK** to return to the lfe properties page, then click **OK** to return to **Internet Services Manager**.
9. Close **Internet Services Manager**.

Setting user permissions for the BNF Toolkit

1. Open **Windows Explorer** and navigate to the LFE. If the BNF has been installed in the default directory the path will be: C:\Inetpub\wwwroot\bnf\lfe.
2. Right click on lfe directory and then click on **Properties**.
3. Click on the **Security** tab. This is where you add or remove users and groups. BNF Toolkit users need to have **Read & Execute, List Folder** and **Read** permissions.
4. Click **OK** to save the changes and get back to the explorer window.
5. Open the lfe folder and right click on the data directory. Open the P**roperties** section and click on the S**ecurity** tab.
6. The users that you added in stage 3 need to be given extra permissions. Click on the boxes for **Write** and **Modify**.
7. Click on the **Advanced** tab below the check boxes. Select the user or group added in stage 3. Click on **View/Edit** and check the box for **Delete Sub folders and Files** in the **Allow** column.
8. Click **OK** to save the changes. You may notice that where it used to say modify in the advanced settings box it now says special.

9. Click **OK** to get back to data properties, and click **OK** once more to return to **Windows Explorer**.
10. Close **Windows Explorer**.

Setting administrator permissions for the BNF Toolkit

1. Open **Windows Explorer** and navigate to the bnf bin directory. If the BNF has been installed in the default directory the path will be : C:\Inetpub\wwwroot\bnf\bin
2. Right click on the bin directory and then click on **Properties**.
3. Click on the **Security** tab. This is where you add or remove users and groups to be administrators. BNF Toolkit administrators need to have **Read & Execute, List Folder, Read, Modify** and **Write** permissions.
4. Click on the **Advanced** tab below the check boxes. Select the user or group added in stage 3. Click on **View/Edit** and check the box for **Delete Sub folders and Files** in the **Allow** column.
5. Click **OK** to save the changes. You may notice that where it used to say modify in the advanced settings box it now says special.
6. Click **OK** to get back to data properties, and click **OK** once more to return to **Windows Explorer**.
7. Right click on the manager.aspx file and click on **Properties**.
8. Click on the **Security** tab. This is where you add or remove users and groups to be administrators. BNF Toolkit administrators need to have **Read & Execute** and **Read** permissions.
9. Click **OK** to return to **Windows Explorer.**
10. Close **Windows Explorer.**

Hint: It is usually best to create groups of users for the BNF Toolkit. Administrators can be a subgroup of normal users so that any permissions given to normal users will automatically be given to administrators.

Chapter 3

Using BNF

About the BNF

The BNF is a joint publication of the British Medical Association and the Royal Pharmaceutical Society. It is published under the authority of a Joint Formulary Committee which comprises representatives of the two professional bodies and of the UK Health Department. The BNF aims to provide doctors, pharmacists and other healthcare professionals with sound up-to-date information about the use of medicines. For more information about the BNF, visit our website at http://www.pharmpress.com/bnf.

How to cite electronic BNF

When you cite BNF, we recommend the following style:

Joint Formulary Committee. British National Formulary. [edition number] ed. London: British Medical Association and Royal Pharmaceutical Society; [year of publication].

This citation should always be added to copies of documents printed from the BNF.

The BNF user interface

There are two user interfaces available for the BNF, called the "frames" interface and the "no frames" interface. You can use either interface for searching and viewing the BNF.

In “frames” mode, the screen is divided into 3 main parts:

- the main frame
- the top bar
- the side bar

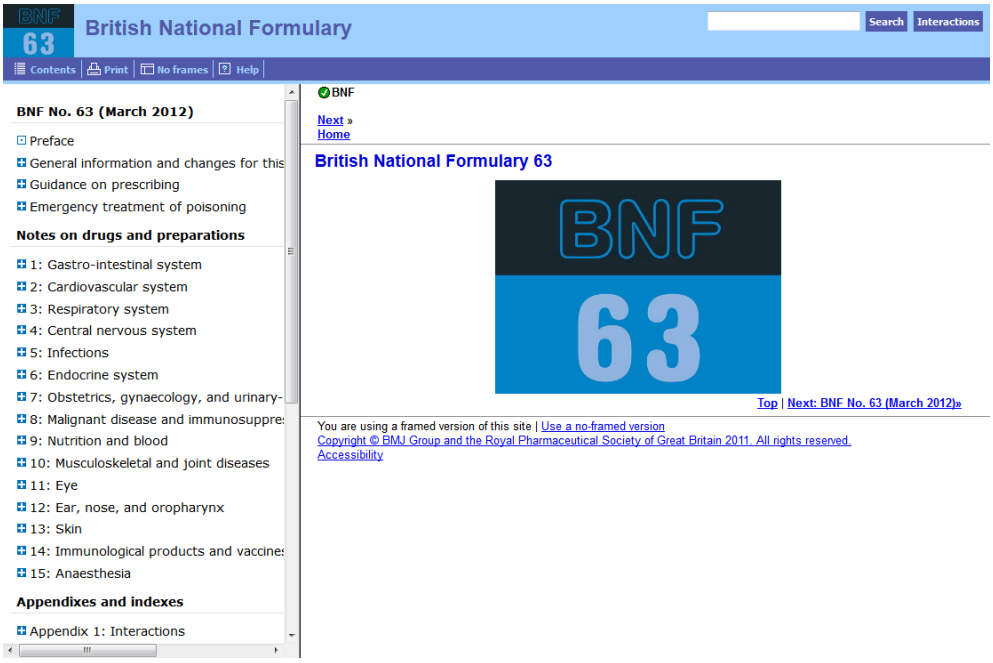
The "no frames" mode has a simplified display, which is more suitable to devices with small screens such as PDAs.

At the bottom of each page is a link which allows you to change from one interface to the other. e.g.

You are using a framed version of this site | Use a no-framed version

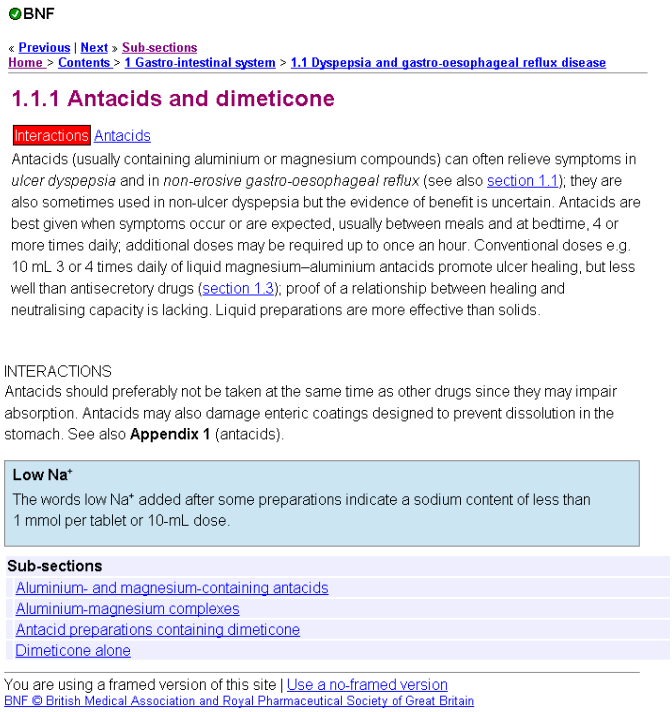
Click the link to change from one mode to the other.

This manual describes only the “frames” interface. For information on the “no frames” interface, use the online help facility by pressing the **Help** button.



Main document frame

The main document frame is used to display the complete text of the document you have selected. The top line gives the position of the document in the hierarchy, and links to the previous and next documents. Towards the bottom of the page is a list of sub-sections for the current chapter or section.


BNF

« Previous | Next » Sub-sections
Home > Contents > 1 Gastro-intestinal system > 1.1 Dyspepsia and gastro-oesophageal reflux disease

1.1.1 Antacids and dimeticone

Interactions Antacids

Antacids (usually containing aluminium or magnesium compounds) can often relieve symptoms in *ulcer dyspepsia* and in *non-erosive gastro-oesophageal reflux* (see also section 1.1); they are also sometimes used in non-ulcer dyspepsia but the evidence of benefit is uncertain. Antacids are best given when symptoms occur or are expected, usually between meals and at bedtime, 4 or more times daily; additional doses may be required up to once an hour. Conventional doses e.g. 10 mL 3 or 4 times daily of liquid magnesium–aluminium antacids promote ulcer healing, but less well than antisecretory drugs (section 1.3); proof of a relationship between healing and neutralising capacity is lacking. Liquid preparations are more effective than solids.

INTERACTIONS
Antacids should preferably not be taken at the same time as other drugs since they may impair absorption. Antacids may also damage enteric coatings designed to prevent dissolution in the stomach. See also **Appendix 1** (antacids).

Low Na⁺
The words low Na⁺ added after some preparations indicate a sodium content of less than 1 mmol per tablet or 10-mL dose.

Sub-sections
Aluminium- and magnesium-containing antacids
Aluminium-magnesium complexes
Antacid preparations containing dimeticone
Dimeticone alone

You are using a framed version of this site | Use a no-framed version
BNF © British Medical Association and Royal Pharmaceutical Society of Great Britain

If the document has been displayed in response to a search, the search terms ('hits') are highlighted. If two or more search terms have been entered, a different colour is used to highlight different hits. If the search included synonyms (e.g. adrenaline/epinephrine), those terms will be highlighted in the same colour.

Activate the frame by clicking anywhere inside it before trying to move about the document

To move up or down

- use the scroll bar on the right of the frame
  - use the 'Page Up' or 'Page Down' keys
  - use the arrow keys

To enlarge the display

- use the mouse to expand the frame
  - move the mouse cursor over the left side of the frame until it turns to a double arrow
  - hold down the left mouse button
  - use the mouse to drag the frame to the size you want
  - release the mouse button

Top bar

The top bar is used to display

- buttons
  - Contents
  - Print
  - Frames / No frames
  - Help
  - Search
  - Interactions
- search box

Buttons

There are five function buttons on the top bar:

Contents

To show the table of contents, click on this button. If you are already looking at a document, the contents list will open at the appropriate chapter.

Print

Click on the Print button to open the Print dialog and allow the current page to be printed on an installed printer

Frames / No frames

By default the browser opens BNF in Frames mode, with menu options or search results in the left hand frame and the publication content in the right hand frame. Click the button to change to a No Frames version.

Help

Click on the Help button for context-sensitive help

Search in Contents

Click on the Search button to perform a text search when you have entered your search terms in the search box.

If you click on the “Search in Contents” button when the search box is empty, information about how to use text search is displayed

Interactions Search

Click on the “Interactions Search” button to perform an interactions search when you have entered your search terms in the search box.

If you click on the Interactions button when the search box is empty, information about how to use interactions search is displayed.

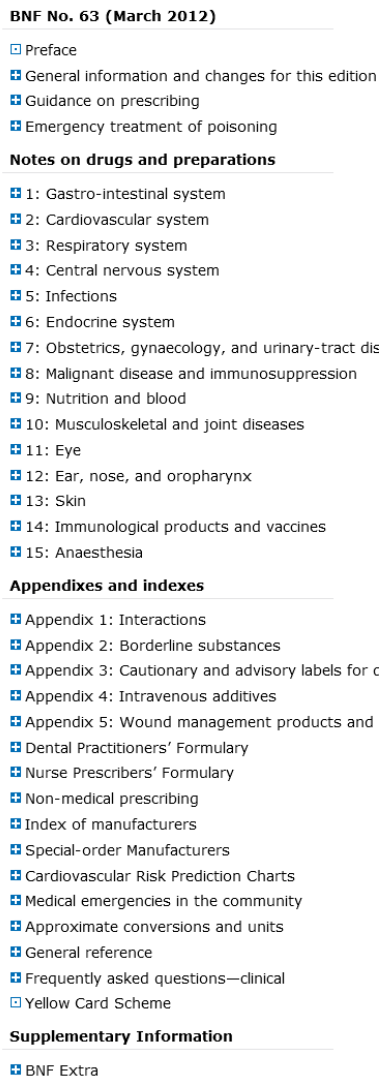
Search box

The search box allows you to search the BNF directly.

Use it to find words or phrases anywhere in the text, or to search for interactions between drugs.

Side bar

The side bar can contain



- the contents list
- search results from a text search
- interactions search results

The heading at the top of the side bar indicates which type of display is active

To move up or down the side bar

- use the scroll bar on the right of the side bar
- use the 'Page Up' or 'Page Down' keys
- use the arrow keys

To see text to the right hand side of the side bar

- use the scroll bar at the bottom
- use the mouse to expand the bar
  - move the mouse cursor over the frame of the side bar until it turns to a double arrow
  - hold down the left mouse button
  - use the mouse to drag the frame to the size you want
  - release the mouse button The side bar is used to display

Contents list

The contents list shows the hierarchical arrangement of documents in the BNF. You can use the contents list to view the contents of any chapter and select documents to view.

To view the contents list, click on the *Contents* button on the top bar

The BNF is organised into 4 preliminary chapters, 15 chapters and a number of appendixes and indexes.

To locate sections within the chapters:

- expand the contents list by clicking on any symbol
- continue to expand the list in the same way until you find a document you wish to view
- click on the title to display the document

or

- click on the chapter title to display a detailed chapter contents list
- follow links under the "Sub-sections" heading to display documents within the chapter

Click on a symbol to collapse the table to that level.

Note: If you cannot see the whole of the entry in the side bar you can; leave the mouse pointer on the entry - the full text will appear or use the mouse to expand the frame or use the scroll bar at the bottom

Note: Some browsers are unable to expand the table of contents levels. In this case, click on the chapter titles and use the list of sub-sections on the chapter page

---

Text search results display

When you perform a text search, the results display in the side bar tells you how your search has been handled.

The display includes:

- An explanation of what has been searched
- the number of matching documents.
- the list of documents retrieved

The list of documents in the side bar includes the titles of the documents and their locations. This will help you select the most relevant records to view.

Interactions search results display

This is the list of documents that results when you perform an interactions search.

Suppose the terms 'Warfarin' and 'alcohol' are entered into the search box, and the Interactions button has been pressed.

At the top of the results page is a description of the query

Find interactions between Warfarin and alcohol.

If the terms have been found in the drug thesaurus, additional information is provided about the interactants.

Warfarin

Used for

Broader terms

alcohol

By expanding the "broader terms" of Warfarin (by clicking on the), Warfarin is shown to be a member of the Coumarins drug group.

The number of interactions found is then given, followed by the interactions information. The results give the interactants (Coumarins and alcohol). Potentially hazardous interaction are noted as such. e.g.

There is **1 document** listing interactions between pairs of interactants searched.

Coumarins + Alcohol

potentially serious

Following the link 'Coumarins + Alcohol' goes to the interactions appendix page where details of the interaction can be found.

Finding information

There are three ways of finding information in the BNF:

- searching the text
- searching the interactions appendix
- browsing with the contents list

Searching the text

Use the Search function to find words or phrases anywhere in the text.

Enter the term you wish to search for in the search box as

- a single word (e.g. aspirin)
- a phrase or multi-word term enclosed in double quotes (e.g. "renal failure")
- several terms separated by spaces (e.g. Warfarin aspirin)

Click on the *Search* button or press the Enter key.

Note: Search is not case sensitive so it does not matter whether you enter your search in capitals or lower case letter

Note: For most searches there is no need to use a special search operator. See Advanced Searching for information on the use of operators.

Note: You can search using drug names or free text terms. Some common synonyms are recognised e.g. epinephrine and adrenaline produce the same search results.

Searching the interactions appendix

Use the Interactions function to find search the interactions appendix.

- Enter the term you wish to search for in the search box as
  - a single word (e.g. aspirin)
  - a phrase or multi-word term enclosed in double quotes (e.g. "ace inhibitors")
  - several terms separated by spaces (e.g. Warfarin alcohol)
- Click on the Interactions button.

Note: Search is not case sensitive so it does not matter whether you enter your search in capitals or lower case letter

Note: For most searches there is no need to use special search operators. See Advanced Searching for information on the use of operators.

Note: Some common synonyms are recognised e.g. epinephrine and adrenaline produce the same search results.

Browsing with the contents list

The contents list shows the hierarchical arrangement of documents in the BNF. You can use the contents list to view the contents of any chapter and select documents to view.

To view the contents list, click on the Contents button on the top bar

The BNF is organised into 4 preliminary chapters, 15 chapters and a number of appendixes and indexes.

To locate sections within the chapters:

- expand the contents list by clicking on any symbol
- continue to expand the list in the same way until you find a document you wish to view
- click on the title to display the document

or

- click on the chapter title to display a detailed chapter contents list
- follow links under the "Sub-sections" heading to display documents within the chapter

Click on a symbol to collapse the table to that level.

Note: If you cannot see the whole of the entry in the side bar you can; leave the mouse pointer on the entry - the full text will appear or use the mouse to expand the frame or use the scroll bar at the bottom

Note: Some browsers are unable to expand the table of contents levels. In this case, click on the chapter titles and use the list of sub-sections on the chapter page.

Navigation

Moving around a document

- Click anywhere in the document display to activate that part of the screen
- Use the **arrow** keys or **Page Up** and **Page Down** keys on your keyboard
- Use the scroll bar (or wheel on your mouse, if available)

Using links

Active links (sometimes referred to as 'hyperlinks') are indicated by underlined text

- position the mouse over a link (the cursor will usually change to a pointing hand)
- click on the link
- the linked document will be displayed.

Footnote links

Footnotes in the text are linked by superscript numbers to the footnote text listed at the page. These superscript numbers act as links to the corresponding footnote.

To check an individual footnote click on the superscript number to scroll to the appropriate place in the list of footnotes at the end of the record.

Moving from one document to another

To move between documents, either select a different document from the list in the side bar or results display, or follow a link within the document that is open.

Printing

Important: Under the terms of our copyright, you may print one copy of any document from the BNF for personal use. You may not make or distribute multiple copies without prior written permission from the publisher.

Print documents from the BNF using the print functions on your browser.

For example, to print a complete document with Microsoft Internet Explorer

- select the document you wish to print
- click anywhere in the document display frame to activate it
- on the menu bar, click **File**
- select **Print** from the drop down menu
- in the **Print Range** box, select **All** for the complete document or a page range
- in the **Print Frames** box, select Only **the selected frame**
- in the **Copies** box, specify the number of copies
- click **OK**

Note: Printing a document as described above will print the complete document and not just the part visible in the document display frame.

Note: We recommend that you print a complete document. If you select part of a document by highlighting it, the printout may lose its formatting and be difficult to read.

Note: Remember to write the source on the copy, using the recommend style for citing the electronic BNF.

Examples of searches

Text search

How do I do a full text search?

Enter your search term or terms in the search box and click on *Search*

e.g. arrhythmias "beta blockers"

The search results appear in the side bar.

At the top of the results is an explanation of the query.

e.g. Find documents matching either **arrhythmias** or **beta blockers**.

The number of results from the full text search is listed immediately above the results list and looks like this:

e.g. **Text search**: there are matches in 150 documents.

When a search returns a large number of results, only the first 50 are displayed initially.

e.g. Results 1 - 50, sorted with best match first.

If you wish to view all the results, follow the link:

show all 150 results.

Beneath this, the list of documents is displayed, together with their positions in the table of contents which may help you locate results within chapters. Clicking on the document title of the result will display the document in the main frame with matching search terms highlighted. If there was more than one search term, hits from each search term will be highlighted in different colours.

A search has returned a result, but nothing is highlighted when I view it. Why?

Text search will retrieve any documents that contain the terms in your search. However, some documents contain hidden "index terms". For example, the search:

e.g. "child-resistant containers"

will return a top match which will does not contain the exact term "child-resistance containers". However, the editors have indexed this document with the phrase "child-resistant containers" because the document is relevant to this term. In fact, the document contains "preparations must be dispensed in a re closable child-resistant container...".

Interactions search

How can I find all the interactions listed for a specific drug?

There are two ways to find all the interactions listed for a specific drug:

- use search
- use the interactions appendix

To use search

- enter the drug name in the search box
- click the 'interactions' button
- the system will check to see whether your term is listed as an interactant
  - if it is, the list of interactions is displayed
  - if your term is not recognised as an interactant, you will see a message to that effect. Check the spelling of your search term; correct it if necessary then click 'Interactions'

To use the interactions appendix

- Locate 'Appendix 1: Interactions' in the table of contents
- Display the document by clicking the title chapter
- Follow the link 'List of drug interactions'

The drugs are organised as a hierarchy of drug groups. For example, ACE inhibitors, such as Captopril are listed under 'ACE inhibitors'.

How do I find specific interactions between two drugs?

Enter your drug terms in the search box and click on the 'Interactions' button

e.g. Warfarin alcohol

The system will firstly check your search terms to see whether they can be matched to listed interactants

A list of interactions between the two drugs will be returned, listed in alphabetical order

Can I search for interactions between drugs and herbals or foods too?

You can include herbal drug names in your search in the same way as other search terms (tell me how).

Some foodstuffs and beverages (e.g. grapefruit juice) are searchable individually.

e.g. "grapefruit juice" Felodipine

Search alcoholic beverages by entering 'alcohol' as a search term

What happens if I search more than two drugs?

If you enter three or more terms the interactions search will look for interactions between all possible pairs of terms from the search.

e.g. alcohol Warfarin Digoxin searches for interactions between:

- alcohol and Warfarin
- alcohol and Digoxin
- Warfarin and Digoxin

You can use special search operators to refine your search

What happens if I mix drug terms and other terms?

You do not need to separate drug terms from other terms when searching. Simply enter all your search terms, separated by spaces.

The system will test all the terms entered to see if they are interactants and perform an interactions search on any it finds.

e.g. Warfarin banana will display a warning to indicate that "banana" is not recognised as an interactant, and will thus return interactions of Warfarin only.

How do I search on a group of drugs?

Drug names are classified in the thesaurus by broad group terms which may include therapeutic, pharmacological, and chemical groups, and metabolic pathways.

It is often easy to guess a group term and find the thesaurus entry (e.g. analgesics)

- enter you group term in the search box and click 'Interactions'
- if your term can be mapped to a group term in the thesaurus the appropriate entry will be displayed
- the group term and all its broader and narrower terms will be included in the interactions search

e.g. "ace inhibitors" finds interactions of ace inhibitors, including Captopril, Cilazapril, Enalapril etc.

Note: Enter multi-word terms in double quotes, e.g. "beta blockers"

You can combine a group term with other terms in a search

e.g. Salicylates Warfarin

Chapter 4

Using The BNF Toolkit

About the LFE

The Local Formulary Editor (LFE) is a tool for creating and maintaining formularies through customisations of the standard web-enabled British National Formulary (WeBNF). A formulary is compiled by marking the information relevant to the specific local formulary used in an institution, as well as adding further information, such as restrictions or links.

The LFE incorporates the Local Formulary Manager which is used to create multiple formularies.

The Local Formulary Manager

The Local Formulary Manager is a tool that allows you to create and maintain multiple formularies. The Manager provides the ability to create an unlimited number of local formularies which can be edited using the Local Formulary Editor.

The Local Formulary Manager is the default page you come to when you enter the LFE, allowing you to choose which formulary to edit.

The screen is divided into 2 main parts:

- The main table
- Below the main table

The Main Table

Name		Title							
lform1	Rename	No Name NHS Trust	Change Title	Not published	Edit	Publish	Enable	Copy	Delete
J1	Rename	Judie's copied formulary	Change Title	Browse	Edit	Publish	Disable	Copy	Delete
M1	Rename	Micah's new formulary	Change Title	Not published	Edit	Publish	Disable	Copy	Delete
test formulary	Rename	NZ trust	Change Title	Browse	Edit	Publish	Disable	Copy	Delete

Administrator view of main table

Name	Title		
lform1	No Name NHS Trust	Not published	Edit
J1	Judie's copied formulary	Browse	Edit
M1	Micah's new formulary	Not published	Edit
test formulary	NZ trust	Browse	Edit

Editor view of main table

This table allows the manager to work with the whole formulary. The manager can delete, create, edit, publish and disable a whole formulary. This page is also a starting point to enter the formulary either to look at the published formulary or to edit individual pages of the formulary.

Name of the formulary

The name of the formulary is the name that will be the identifying part of the URL that is used to browse to the formulary.

Administrators are able to change the name of the formulary by clicking on the Rename button. The name can only contain letters, numbers or underscores - no spaces or punctuation are allowed. The name must also be unique.

Rename

1. Click on the **rename** button
2. In the pop-up window enter the new name
3. Press the **Ok** button to save the new name, or **Cancel** to exit.

Title of the formulary

The LFE allows you to change and personalise the WeBNF and it is helpful to mark the formulary by giving it an appropriate title, such as the name of your institution or pharmacy. Thus the user will be able to see whether they are using a customised or the standard version of the WeBNF.

Administrators are able to change the title of the formulary by clicking on the Change Title button. The title can contain any letters or characters.

Change Title

1. Click on the **Change Title** button
2. In the pop-up window enter the new title
3. Press the **Ok** button.

Browse

This link opens a new browser with the WeBNF and the local formulary in it.

Edit

This link takes you to the Local Formulary Editor pages.

Publish

Pressing this button means that all the changes that have been made by editors since the last time the formulary was published will be made visible in the browser.

Enable/Disable

The **Disable** button allows the administrator to stop people being able to view the local formulary. When the disable button has been clicked, the formulary row in the Local Formulary Manager goes grey and the **Browse** button is replaced by text to say that the formulary is not published.

If a user browses to the formulary, they can see the WeBNF but not any of the additions made to the local formulary. So none of the new additions to the formulary will be visible and none of the extra information added to BNF items will be visible.

To make the formulary visible again, click the **Enable** button.

Copy

The Local Formulary Manager allows you to create a new formulary copying local formulary data from an existing formulary.

1. Click on the **Copy** button
2. Type in the name of the new formulary. The name can only contain letters, numbers or underscores - no spaces or punctuation are allowed. The name must also be unique. A formulary cannot be created if another with the same name exists.
3. Click the **Ok** button to create the copied formulary, or **Cancel** to exit.

The new formulary will have the same title as the formulary that it is copied from. To change the title, click on the **Change Title** button.

Delete

A local formulary can be deleted which will permanently delete all the formulary information.

Be sure to have a backup of a local formulary in case you wish to keep the information for use at a later stage.

1. Click on the **Delete** button
2. The local formulary manager will ask you to confirm that you want to delete the formulary.
3. Click the **Ok** button to permanently delete the formulary.

Below the Main Table

New Formulary

The Local Formulary Manager allows you to create an unlimited number of formularies.

1. Click on the **New Formulary** button
2. Type in the name of the new formulary. The name can only contain letters, numbers or underscores - no spaces or punctuation are allowed. The name must also be unique. A formulary cannot be created if another with the same name exists.
3. Click the **Ok** button to create a formulary, or **Cancel** to exit.

The new formulary will have a default title of 'No Name NHS Trust' as the formulary. To change the title, click on the **Change Title** button.

View as Administrator

Click on this link to move from the editor Local Formulary Manager screen to the administrator screen with the extra functionality. If the user is not logged in as an administrator, the link may pop-up a login box so that the user can login as an administrator.

Help

Click on the help link to take you to the help pages.

The Local Formulary Editor

The Local Formulary Editor is the main editing page for the local formulary.

The screen is divided into 3 main parts:

- The top bar
- The side bar
- The viewer

The Top Bar

Manage

Click on the manage link to takes you back to the Local Formulary Manager.

Print Formulary

Click on the print formulary link to take you to a printable version of the local formulary.

Print the local formulary using the print functions on your browser.

For example, to print a complete document with Microsoft Internet Explorer

- select the document you wish to print
- click anywhere in the document display frame to activate it
- on the menu bar, click **File**
- select **Print** from the drop down menu
- in the **Copies** box, specify the number of copies
- click **OK**

Note: Printing a document as described above will print the complete document and not just the part visible in the document display frame.

We recommend that you print a complete document. If you select part of a document by highlighting it, the printout may lose its formatting and be difficult to read. If you wish to print a section of the local formulary, use the **Print Section** link.

List/Remove Old Items

The WeBNF is released twice yearly and numerous changes are made between issues. An item containing formulary information that has been removed from the latest issue of the WeBNF will no longer be visible in the Local Formulary Editor. Similarly, user created items 'under' the removed node will also not be visible.

Items that have not been marked as formulary or contain no formulary information will not appear in this list.

All changes to the WeBNF content from the previous issue can be viewed in 'Changes for this edition'.

- Click on the **List/Remove Old Items** link. This will open a window showing any items that will no longer appear in the latest issue of the WeBNF.
- Select the items to be removed by clicking in the tick box to the left of the item or select all items clicking **Select All**.
- Press **Remove Selected** to remove formulary information marked by tick boxes, or press **Close** to exit.

Search

The search facility is in two sections:

- Search box
- Search button

Search box

The search box allows you to search the BNF directly.

Use it to find words or phrases anywhere in the text.

Search button

Click on the Search button to perform a text search when you have entered your search terms in the search box.

If you click on the Search button when the search box is empty, information about how to use text search is displayed.

Contents

The contents link allows you to see the BNF contents page in the side bar.

Help

Click on the help link to take you to the help pages.

The Side Bar

The side bar can contain

- the Contents List
- Search results from a text search

To move up or down the side bar

- use the scroll bar on the right of the side bar
- use the 'Page Up' or 'Page Down' keys
- use the arrow keys

To see text to the right hand side of the side bar

- use the scroll bar at the bottom
- leave the mouse pointer on the entry - the full text will appear

Contents

The contents list shows the hierarchical arrangement of documents in the BNF and local formulary. You can use the contents list to view the contents of any chapter and select documents to view.

To view the contents list, click on the **contents button** on the top bar

The BNF is organised into 4 preliminary chapters, 15 chapters and a number of appendixes and indexes.

To locate sections within the chapters:

- expand the contents list by clicking on any symbol
- continue to expand the list in the same way until you find a document you wish to view
- click on the title to display the document

or

- click on the chapter title to display a detailed chapter contents list
- follow links under the "Sub-sections" heading to display documents within the chapter

Click on a symbol to collapse the table to that level.

Note: If you cannot see the whole of the entry in the side bar you can

- leave the mouse pointer on the entry – the full text will appear
- use the scroll bar at the bottom

Some browsers are unable to expand the table of contents levels. In this case click on the chapter titles and use the list of sub-sections on the chapter page.

Search

When you perform a text search, the results display in the side bar tells you how your search has been handled.

The display includes:

- An explanation of what has been searched
- the number of matching documents.
- the list of documents retrieved

The list of documents in the side bar includes the titles of the documents and their locations. This will help you select the most relevant records to view.

The Viewer

The Top Bar

Add Subsection

This version of the LFE allows you to add extra text (plain or HTML) to your WeBNF via user-created items. This is very useful to make large parts of extra information available, such as products and other items not included in the BNF. By adding this information through extra items in the navigation tree all drug information available in your customised WeBNF can be well organised. You can even create whole sub trees by adding new items to added items.

For these added items you still have all other features, such as marking them as **restricted**, adding **extra information** and entering **links**.

- Select the parent item under which you would like to add your extra item.
- Click on Add Subsection link. The new item is added into the navigation tree and the preview window shows a preview of the new item.
- Click on the **edit tab** to edit the text of the new item.

Delete Item

Any user created item can be deleted by clicking the Delete Item link. Deleting an item will delete all the information connected to it and all subsections of that item. It is not possible to remove BNF items from the hierarchy.

- Select the item that you wish to delete.
- Click on the **delete item** link
- Click on the **OK** button to permanently delete the item, and **Cancel** to exit.

Print Section

Click on the print section link to take you to a printable version of the section of the local formulary.

Print the section using the print functions on your browser.

For example, to print a complete document with Microsoft Internet Explorer

- select the document you wish to print
- click anywhere in the document display frame to activate it
- on the menu bar, click **File**
- select **Print** from the drop down menu
- in the **Copies** box, specify the number of copies
- click **OK**

Notes: Printing a document as described above will print the complete document and not just the part visible in the document display frame.

We recommend that you print a complete document. If you select part of a document by highlighting it, the printout may lose its formatting and be difficult to read. If you wish to print the whole local formulary, use the **print formulary** link.

Change Title

The LFE allows you to change and personalise the WeBNF and it is helpful to mark the formulary by giving it an appropriate title, such as the name of your institution or pharmacy. Thus the user will be able to see whether they are using a customised or the standard version of the WeBNF.

Administrators are able to change the title of the formulary by clicking on the Change Title button. The title can contain any letters or characters.

Change Title

1. Click on the **Change Title** button
2. In the pop-up window enter the new title
3. Press the **OK** button or **Cancel** to Exit.

The change will only be made to the live formulary once an administrator has published the formulary.

Preview Window

The Preview Window will display a preview of what the users will see in the WeBNF, when the LF is applied.

Tabbed section

Local Formulary check box

This check box marks the item as being in the local formulary or not.

Restricted Tab

Some items in the local formulary may have restrictions placed on their usage. Setting an item as restricted by checking box will enable (changes colour from grey to white) the text entry box in the Editing panel to allow you to enter any conditions on the restriction. Any text entered here will appear near the top of the WeBNF page, highlighted on a light-red background, as seen in the Preview window. The style of this text can be modified by using HTML Tags.

Make sure that the item is marked as local formulary i.e. that the Local Formulary Check box is checked.

1. Ensure that the **Local Formulary check box** is checked.
2. Clicking in the Restricted check box of the local formulary item will flag the item as restricted.
3. If appropriate, enter any information about the restriction in the text box.
4. Click the **Save Changes** button to save the changes and view the changes in the preview window.

Extra Info Tab

Your pharmacy may wish to add information about an item that is not normally included in the BNF entry. You can enter any text (plain or with HTML tags) and it will appear near the top of the WeBNF page, highlighted on a light blue background in the Preview window.

1. Clicking on the Extra Info tab will bring this sheet to the foreground.
2. Check the Extra Info check box by clicking it. This will allow you to enter text in the text box.
3. Click the **Save Changes** button to save the changes and view the changes in the preview window.

Link Tab

The Local Formulary Editor gives you the possibility to include a link on your WeBNF page that when clicked will pop up a window to another data resource. In its simplest form this may be an URL to a web page, held either locally or at an external site. If the end-user's browser is set up appropriately, the link can also be to MS-Word or PDF files.

1. Click on the Link tab and check the **Has URL Link** check box.
2. Type the URL in the URL box and a caption in the caption box.
3. You can check that the URL is correct but clicking the **Check URL…** button. A new browser will open with the requested page in it.
4. Click the **Save Changes** button to save the changes and view the changes in the preview window.

Edit Tab

The Edit tab allows you to edit the information in a user-created item. You can enter any text (plain or **HTML**) as the main text. Each user created item will be printed in the style determined my the Printing Style in the drop-down box.

1. Click on the Edit tab, this will bring the sheet forward.
2. You can change the title of the new item by changing the text in the **Title** box.
3. In the **Text** box you can insert text with or without HTML tags.
4. You can change the printing style using the **Printing Style** drop down box.
5. Click the **Save Changes** button to save the changes and view the changes in the preview window

Save Changes

The Save Changes button saves all the changes that have been made to the individual formulary page. The formulary page is then refreshed in the preview window with all the new changes.

Finding Information

Searching the text

Use the Search function to find words or phrases anywhere in the text.

- Enter the term you wish to search for in the Search Box as
  - a single word (e.g. aspirin)

- a phrase or multi-word term enclosed in double quotes (e.g. "renal failure")
- several terms separated by spaces (e.g. Warfarin aspirin)

- Click on the **Search Button** or hit **Enter**.

Notes: Search is not case sensitive so it does not matter whether you enter your search in capitals or lower case letter

For most searches there is no need to use a special search operator. See **Advanced Searching** for information on the use of operators.

You can search using drug names or free text terms. Some common synonyms are recognised e.g. epinephrine and adrenaline produce the same search results.

Browsing with the contents list

The contents list shows the hierarchical arrangement of documents in the BNF. You can use the contents list to view the contents of any chapter and select documents to view.

To view the contents list, click on the Contents Button on the top bar

The BNF is organised into 4 preliminary chapters, 15 chapters and a number of appendixes and indexes.

To locate sections within the chapters:

- expand the contents list by clicking on any symbol
- continue to expand the list in the same way until you find a document you wish to view
- click on the title to display the document

or

- click on the chapter title to display a detailed chapter contents list
- follow links under the "Sub-sections" heading to display documents within the chapter

---

Click on a symbol to collapse the table to that level.**:** If you cannot see the whole of the entry in the side bar you can

- leave the mouse pointer on the entry - the full text will appear
- use the scroll bar at the bottom

Some browsers are unable to expand the table of contents levels. In this case, click on the chapter titles and use the list of sub-sections on the chapter page.

Navigation

Moving around a document

- Click anywhere in the document display to activate that part of the screen
- Use the **arrow** keys or **Page Up** and **Page Down** keys on your keyboard
- Use the scroll bar (or wheel on your mouse, if available)

Using Links

Active links (sometimes referred to as 'hyperlinks') are indicated by underlined text

- position the mouse over a link (the cursor will usually change to a pointing hand)
- click on the link
- the linked document will be displayed.

Moving from one document to another

To move between documents, either select a different document from the list in the **Side Bar** or results display, or follow a **link** within the document that is open.

Printing

Print the local formulary using the print functions on your browser.

For example, to print a complete document with Microsoft Internet Explorer

- select the document you wish to print
- click anywhere in the document display frame to activate it
- on the menu bar, click **File**
- select **Print** from the drop down menu
- in the **Copies** box, specify the number of copies
- click **OK**

Note: Printing a document as described above will print the complete document and not just the part visible in the document display frame.

We recommend that you print a complete document. If you select part of a document by highlighting it, the printout may lose its formatting and be difficult to read. If you wish to print the whole formulary, use the **Print Formulary** link. If you wish to print a section of the local formulary, use the **Print Section** link.

Searches

Search Examples

How do I do a full Text Search?

Enter your search term or terms in the search box and click on 'Search'

e.g. arrhythmias "beta blockers"

The search results appear in the **Side Bar**.

At the top of the results is an explanation of the query.

e.g. Find documents matching either **arrhythmias** or **beta blockers**.

The number of results from the full text search is listed immediately above the results list and looks like this:

e.g. **Text search:** there are matches in 150 documents.

When a search returns a large number of results, only the first 50 are displayed initially.

e.g. Results 1 - 50, sorted with best match first.

If you wish to view all the results, follow the link:

show all 150 results.

Beneath this, the list of documents is displayed, together with their positions in the table of contents which may help you locate results within chapters. Clicking on the document title of the result will display the document in the **preview window** with matching search terms highlighted. If there was more than one search term, hits from each search term will be highlighted in different colours.

A Search has returned a result, but nothing is highlighted when I view it. Why?

Text search will retrieve any documents that contain the terms in your search. However, some documents contain hidden "index terms". For example, the search:

e.g. "child-resistant containers"

will return a top match which will does not contain the exact term "child-resistance containers". However, the editors have indexed this document with the phrase "child-resistant containers" because the document is relevant to this term. In fact, the document contains "preparations must be dispensed in a re closable child-resistant container...".

HTML Tags

You may wish to add emphasis or colour to text that you type into the **Restricted** or **Extra Info** text boxes, or you may wish to add hyperlinks to web pages. For this text formatting or a hyperlink to appear in a web browser, it needs HTML tags to be included in the text that is sent to the browser. Any formatting or hyperlink that you wish to appear in the resultant HTML page will need to be inserted directly as HTML tags when you type in the information. A non-exhaustive list of a few common tags is shown below.

Tags	Result
bold	**bold**
italic	*italic*
<u>under</u>	under
coloured	coloured *
<big>bigger</big>	bigger
see bnf.org	See bnf.org

*note the American spelling in the Tag.

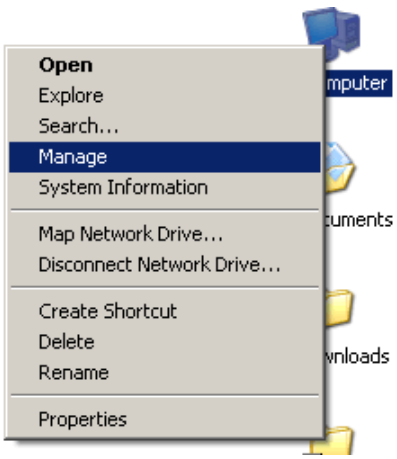
Chapter 5

Troubleshooting

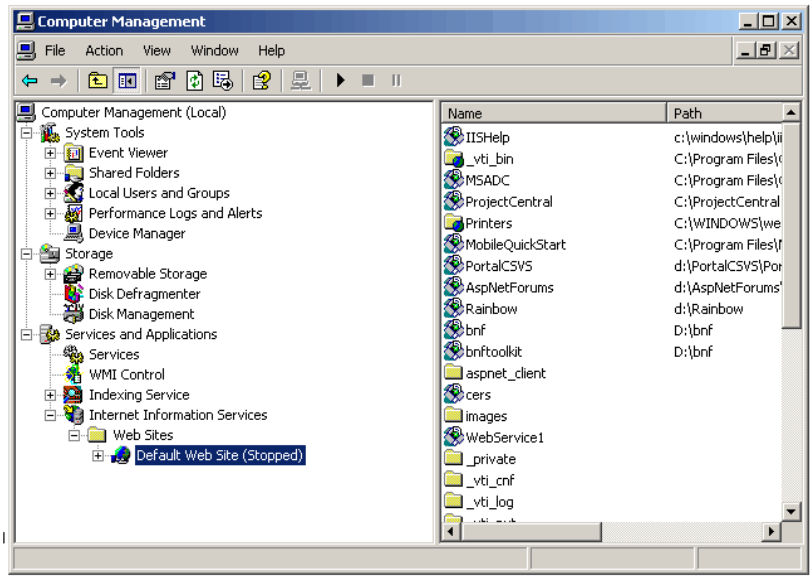
Installation problems

I can’t browse to BNF I just installed, what’s wrong?

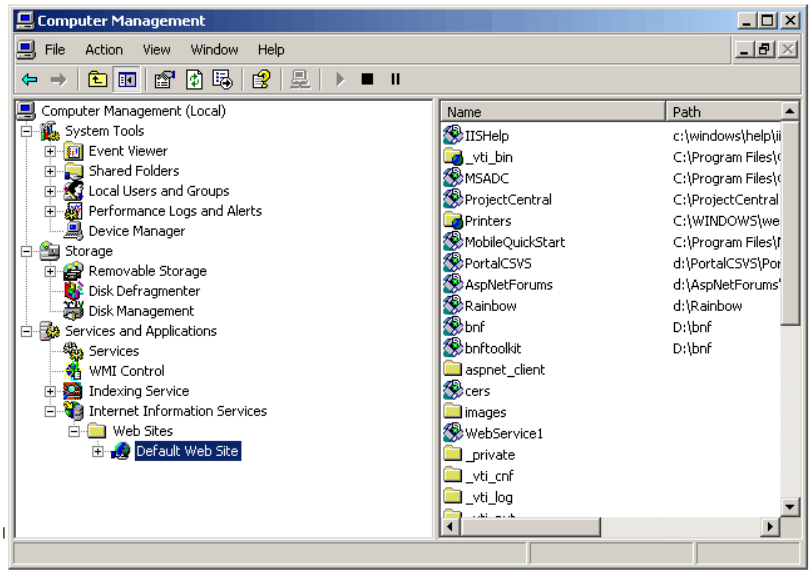
If you tried to browse to http://localhost/bnf on the machine where BNF was installed, and you failed to get a response from the server, it is likely that IIS has not been started on the server. Right-Click on My Computer on your Desktop and select the **Manage** option



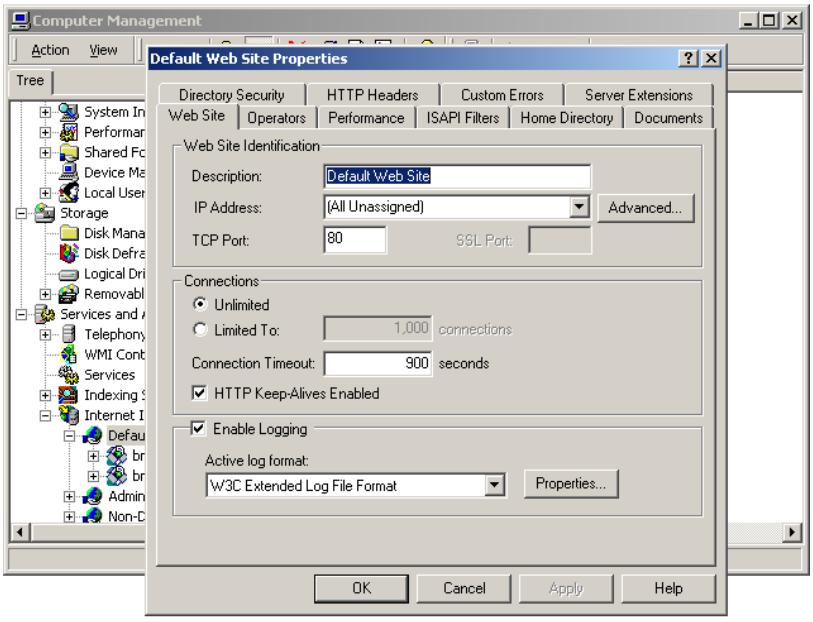
The Computer Management Console will appear, scroll down to the bottom of the left hand (tree) pain and expand Services and Applications -> Internet Information Server -> Web Sites -> Default Web Site. (If you have not used the default website select the site that you have installed BNF into – Please see the section **Installing to a non Default Website** under the **Post installation tasks** section)



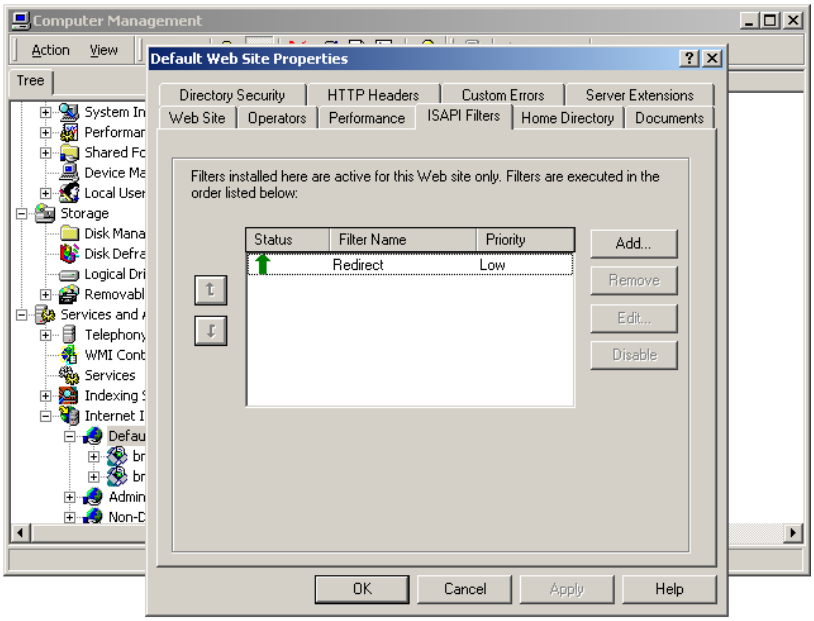
Click on the Play Icon in the toolbar to start the Web Site, after a short wait the Default web site should be running. Browse to http://localhost/ to confirm that the default web site is running, and then to http://localhost/bnf to confirm that BNF is running.



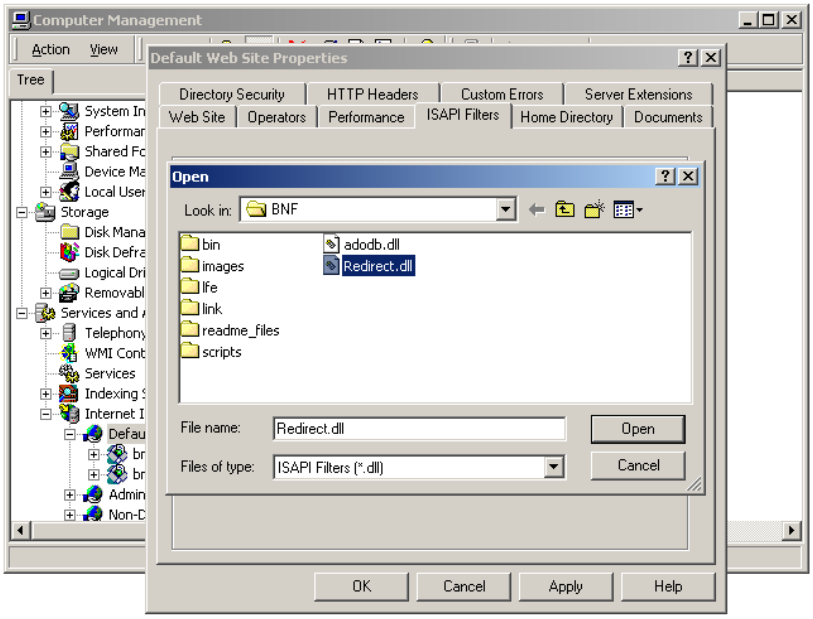
If you are still having trouble accessing http://localhost/bnf/ , Right click on the website BNF is installed under (Normally the Default Website) and select Properties



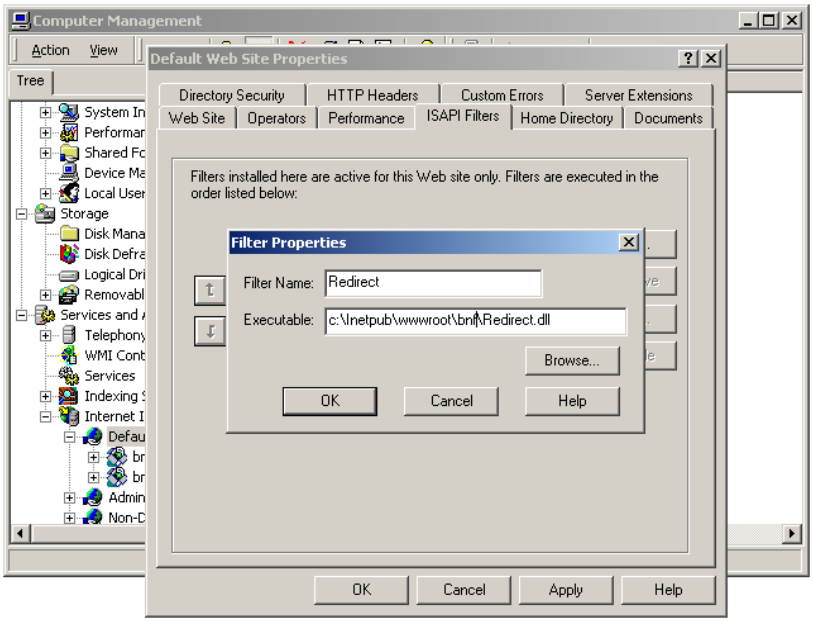
Now select the ISAPI Filters tab from the top of the list, you should see a filter named redirect listed with a green arrow pointing up next to it.



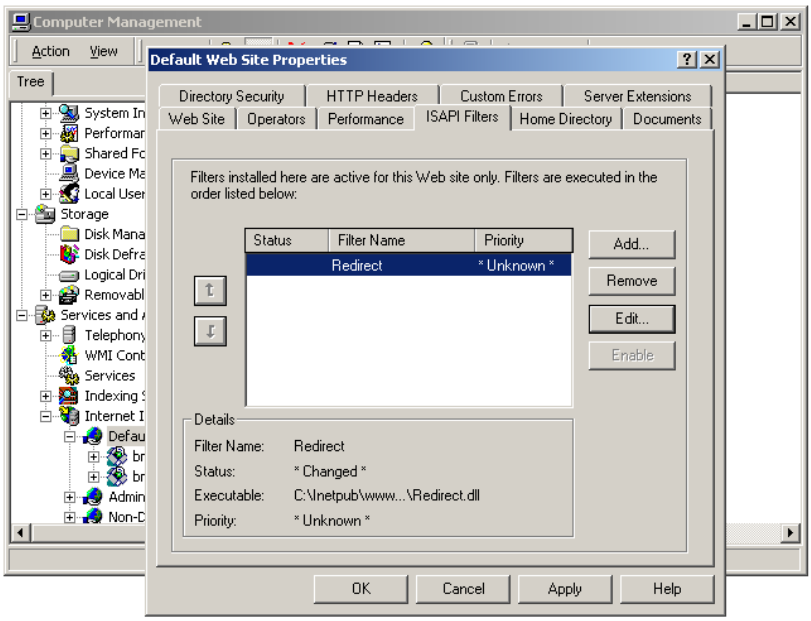
If the Redirect Filter is not listed, Click on the Add button and enter the name Redirect and Browse to the installation path of the BNF where you should see a file named redirect.dll



Click Open to select the file



Click OK. You will now see the filter priority status listed as Unknown.

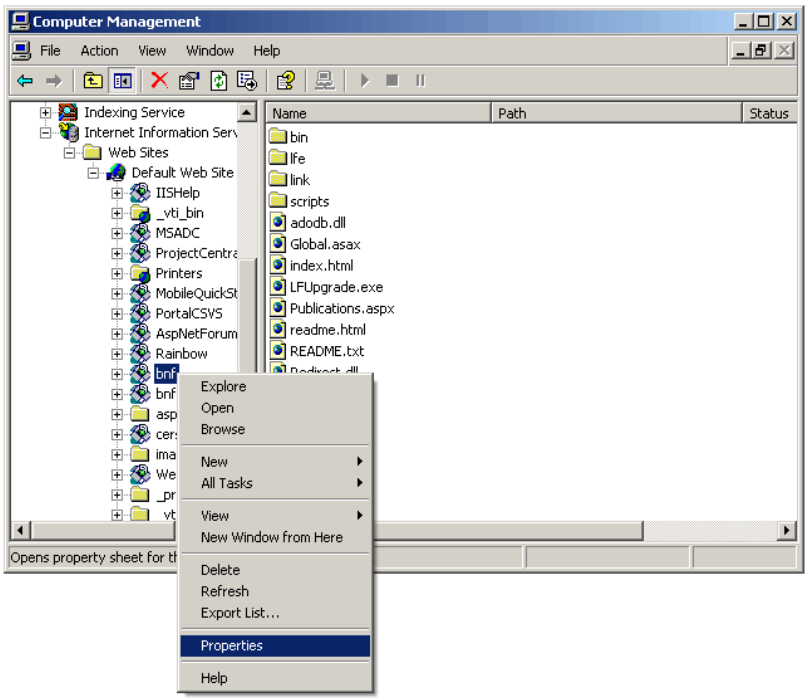


Click Apply and then OK, Browse to http://localhost/ to confirm that the default web site is running, and then to http://localhost/bnf to confirm that BNF is running.

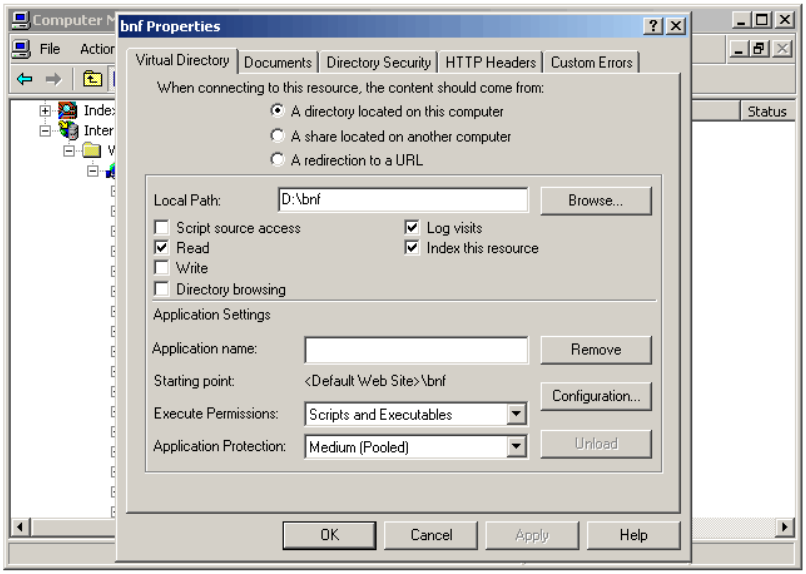
NET Framework not correctly installed

If you can browse to http://localhost/ but you still get a “Page Not Found” it is possible that the .NET Framework is not correctly registered with IIS. To confirm if this is the case open the **Computer Management** console as above.

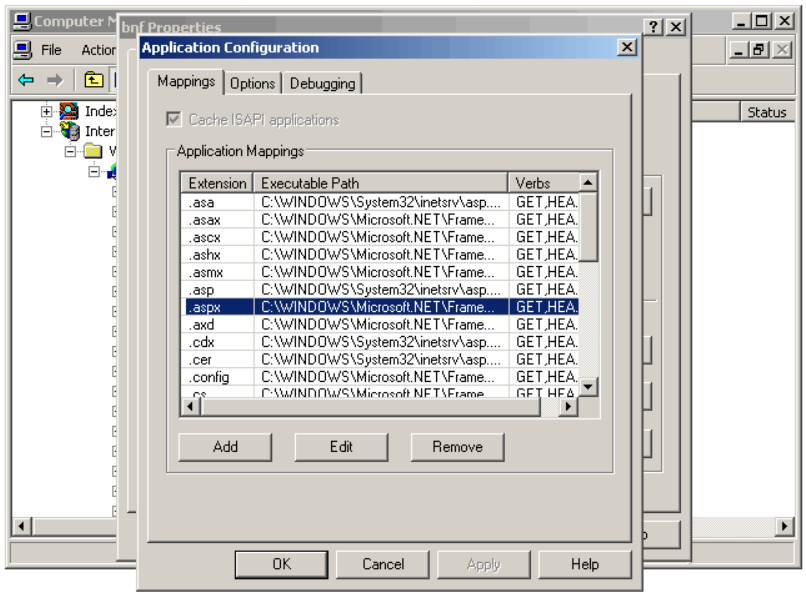
Click on the **Default Web Site** in the tree plain to see the **bnf** and **bnf toolkit** web applications. Then Right-Click on the **bnf** web application and select **Properties** from the pop-up menu.



On the **Site Properties** dialogue select the **Virtual Directory** tab and click on the **Configuration** button.



On the **Application Configuration** Dialog that appears select the **Mappings** tab and scroll down to check that the **.aspx** extensions is registered for the executable **C:\WINDOWS\Microsoft.NET\Framework\v1.0.3705\aspnet_isapi.dll** for verbs including **GET, HEAD and POST**. If there are other verbs listed, these should be left as they are.



If you find that the **.aspx** extension is not registered you may use the following command to register the .NET Framework with IIS.

```
\Windows\Microsoft.Net\Framework\v1.0.3705\aspnet_regiis.exe -i
```

Can’t browse to a BNF from a remote machine

BNF server is normally accessible using the http protocol on port 80. You should check that any security precautions such as firewalls are letting you access web sites in general and the BNF server in particular.

Tree does not display in local formulary editor

Look in `INSTALLDIR\bnf\lfe\Web.config` at

```
<add key="master.url"   value="http://localhost/bnf/"/>
```

Is the BNF visible at the given URL? If not edit the value to be a URL through which the BNF is accessible.

Anti-virus software

It is possible some anti-virus software can interfere with the local formulary editor. We have had a reported case of *“CA eTrust InnoculateIT V6.0”* stopping the local formulary editor working. If you suspect this might be the case please try excluding the lfe directory and subdirectories from being scanned.

Pop-up Blocking Software

It is possible that some pop-up and ad blocking software may cause problems with the BNF Toolkit. There has been a reported case where “Norton Internet Security V7.0.6.17” has caused the navigation to function incorrectly.

'The licence key file "xxxxxx\licence.rdf" appears to have been tampered with. It is digitally signed, and must not be altered.' and .NET version 2.0 is installed

Due to the way that Microsoft have modified the Digital signing libraries between versions of .NET 1.1 and .NET 2.0, BNF 63 must be setup to run under .NET 1.1 even if .NET 2.0 is installed.

To set this up please follow the following steps:

1. Open Internet Information Services by selecting Start -> Run , type inetmgr and press enter
2. Locate the website that has the BNF 63 installed into it
3. Expand the website to list the items 'bnf' and 'bnftoolkit' (if the bnftoolkit is installed)
4. Right click the item 'bnf' and select 'Properties'
5. Once the Properties dialog has opened select the 'ASP.NET' tab
6. Change the ASP.NET Version to 1.1.4322
7. Click 'Apply', then 'OK'

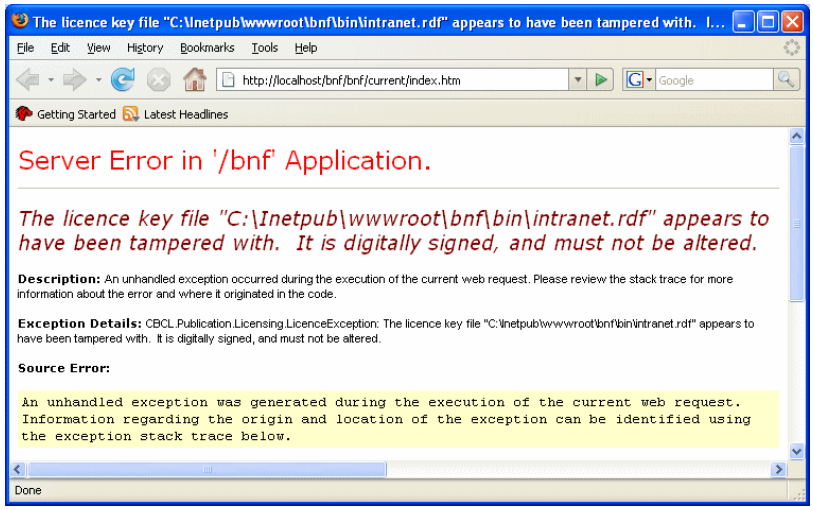
If the BNFToolkit is installed this procedure should be repeated for the item 'bnftoolkit'.

Close Internet Information Services.

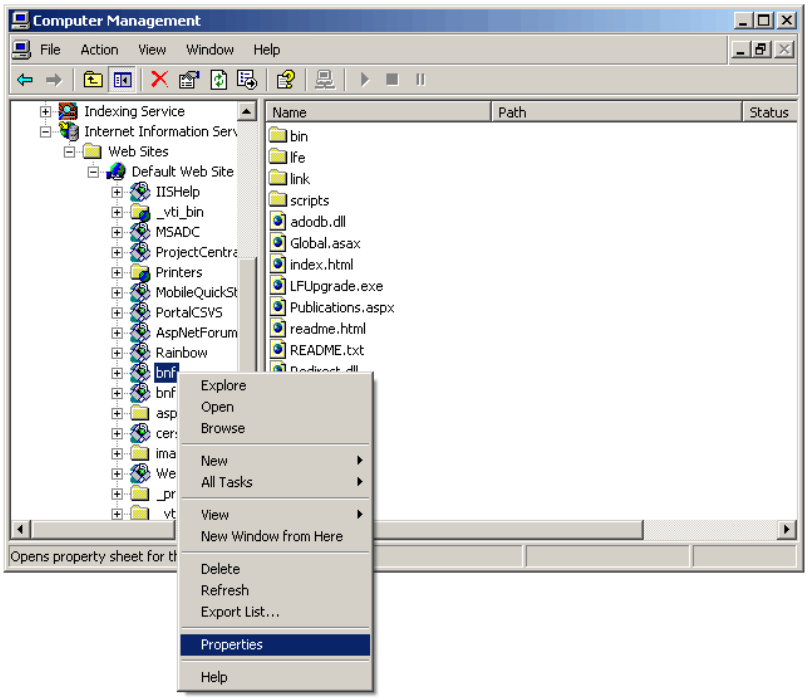
Check that the BNF 63 is now visible.

Intranet.rdf Error

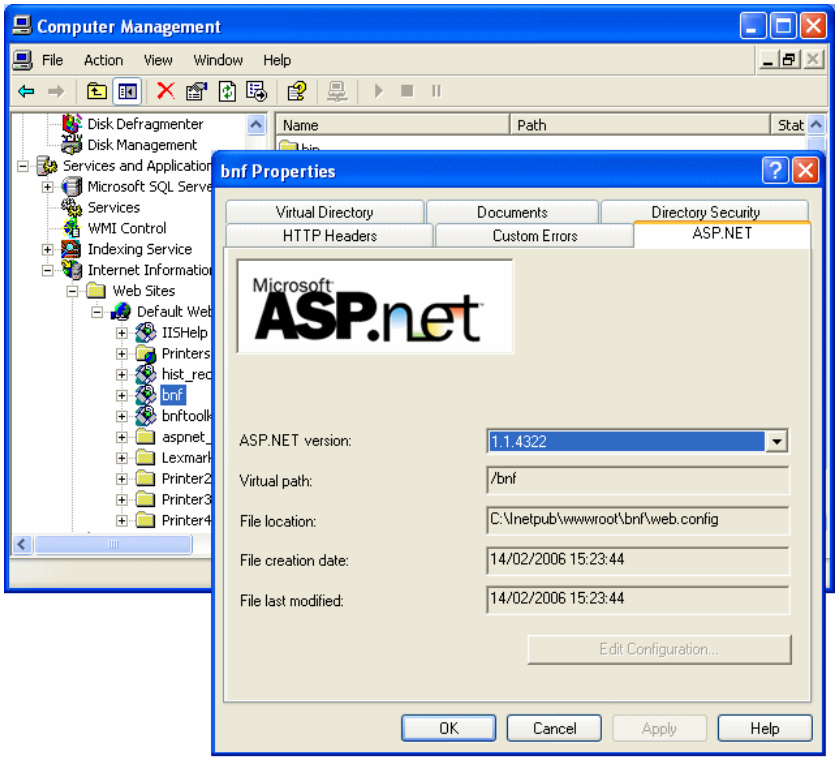
If you can browse to http://localhost/ but you get a “Server Error” it is possible that a later version of the .NET Framework has been registered with IIS.


The licence key file "C:\Inetpub\wwwroot\bnf\bin\intranet.rdf" appears to have been tampered with. I...
File Edit View History Bookmarks Tools Help
http://localhost/bnf/bnf/current/index.htm
Getting Started Latest Headlines
Server Error in '/bnf' Application.
The licence key file "C:\Inetpub\wwwroot\bnf\bin\intranet.rdf" appears to have been tampered with. It is digitally signed, and must not be altered.
Description: An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.
Exception Details: CBCL.Publication.Licensing.LicenceException: The licence key file "C:\Inetpub\wwwroot\bnf\bin\intranet.rdf" appears to have been tampered with. It is digitally signed, and must not be altered.
Source Error:
An unhandled exception was generated during the execution of the current web request. Information regarding the origin and location of the exception can be identified using the exception stack trace below.
Done

To confirm if this is the case open the **Computer Management** console as above. Click on the **Default Web Site** in the tree plain to see the **bnf** and **bnf toolkit** web applications. Then Right-Click on the **bnf** web application and select **Properties** from the pop-up menu.



On the **bnf Properties** dialogue, select the **ASP.NET** tab, select the **ASP.NET version** drop down box, select **1.1.4322** and choose the **Apply** button.



Repeat this selection for **bnftoolkit** web application.

Reporting Errors

If this manual has not helped you solve your problem please look at http://www.cbcl.co.uk/support/ for any recent updates, or e-mail support@cbcl.co.uk with details of the problem and your setup.

Useful error information is stored in the Windows application log on the BNF server. The local formulary editor logs errors to INSTALLDIR\bnf\lfe\bin\logs\log.txt (local formulary editor). As of BNF 48, this can be viewed with at http://*server*:*port*/bnftoolkit/logs/log.txt from client machines.

Chapter 6

Known Issues

Issue: Tree navigation images fail to load with particular versions of IE6 on Windows XP on first use of BNF.

Explanation: Under certain circumstances with a particular combination of cumulative security patches applied to IE6 on Windows XP Pro, you will not see the and symbols on the contents tree. This is due to a bug in IE6.

Workaround: Either update IE6 from the Microsoft web site or browse to http://<hostname>/bnf/lform1/current/doc/contents.htm and then return to the main BNF page, the images should now display

Issue: With IE6 on Windows XP, in the LFE, the name of the formulary appears in an edit box, but the box is not editable. In most other browsers, the title does not look like it is in an edit box and looks just like normal text.

Explanation: This is due to a bug in IE6.

Workaround: There is no workaround for this. To change the title of the formulary, use the **Change Title** button.